

**VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE MEETING  
MINUTES**

**John H. Kerr Visitors Center**

**April 15, 2008**

Attendance: VRRBAC members Delegate Charles Poindexter, Reed Charlton, Walter Coles, Robert Conner, John Feild, Haywood Hamlet, Bob Jean, Evelyn Janney, John Lindsey, Mike McEvoy, State Agencies: DEQ: Greg Anderson, Scott Kudlas, and Terry Wagner; DCR: Dean Gall.

**Welcome and Recognition of Members and Visitors:**

Wayne Carter, Mecklenburg County Administrator welcomed everyone to Mecklenburg County and the John H. Kerr facility. Our most valuable resource is water. You can live without most everything, but if you didn't have water and this drought has shown us the value of water. We have communities that no longer have an unlimited supply. Water affects every part of our life. It affects you at home, it affects your business, your industries, your availability to recruit those business and industries, which employees your people, which keeps your locality growing. That is what we're here about. I think, as I said, the drought really has pushed this to the forefront, but it's been an issue that has been going on. We have other issues, not just with the availability of water, but also the quality of water is a great issue. Kerr Lake, we are blessed, is the major flood control structure on the Roanoke River Basin. The reason why people want the water from Kerr Lake is because of the purity of it. We have clean water their issues up the stream and down stream with regards to that, which will be taken up by respective legislators. For example, Pittsylvania County's looking at uranium mining. You have other issues east of us. I think these are issues that are all going to come and be part of what is discussed in the future with this Basin because we have got to protect our environmental resources. I think as people discuss global warming, things of that nature, you realize that for years we thought the environment would take whatever we did, from regards to run off to everything else, but we've been shown that we have to actually look after our natural resources. So again, I want to thank all of you'll for coming, please stay, spend money in Mecklenburg, we always like that, I really appreciate that, but if there is anything we can do for you, please let us know. Again, thank you for coming.

Michael Womack, USACE, said he would like to reiterate what Wayne said and to welcome everybody. This Committee does important work and we're happy to be able to host you here today. Thanks for being here, and we are happy to host this meeting.

Guests and visitors included Steve DeLange, Hank Maser, Alan Piner, Penny Schmitt, and Michael Womack of the U.S. Corps of Engineers; Brian McCrodden, HydroLogics; Phil Fragapane, NC Division of Water Resources; Dallas Westen, News Progress; Bill Lindenmuth and Vernon Wilson, Lake Gaston Association; Gene Addesso and John Ryan, Roanoke River Basin Association; Bill Reidenbach, Navigation Committee for the Tri-County Lake Commission; Chuck Neudorfer, Bedford County Board of Supervisors; Bill Brush, Smith Mountain Lake Association; and Andrew Lester, Pittsylvania County.

Bill Brush, SMLA; "Appalachian Power Company's Proposal for Water Management at the Smith Mt. Lake Project"

Chairman Poindexter said we would like to start this morning with Bill Brush from the Smith Mountain Lake Association, which is citizen group representing the Smith Mountain Lake Project, which by the way, includes Leesville Lake. Bill's been active in many aspects of that and this morning this project is what you see up there, the Appalachian proposal for Water Management and Water Release for Renewal of the FERC License which will run approximately 40 years, which is under consideration now. Bill Brush indicated that before he started that Chuck Neudorfer, Bedford County BOS would like to say a few words.

Chuck Neudorfer: I'm with the Bedford County Board Supervisors but also part of what is called the Tri-County Re-Licensing Committee. I'd like to explain that in a couple of ways very briefly, if I may. The Committee was established in 2004 to consider the re-licensing of the Smith Mountain Project. It consists of 2 members of the Board of Supervisors from each of the counties, the County Administrator, and the Attorney for Bedford County giving legal advice. Since it was formed a 4th county has joined. We have not re-named ourselves because of the process you have to go through. I'd like to call it the County's Re-Licensing Committee if I could. It's Bedford County, Franklin County, Pittsylvania County, and Campbell County has joined in the last couple of years. So we are a 4 county organization looking at the re-licensing. We have participated in about 13 different study areas, one of which we will be talking about today. I'd like to make the point that as a Committee of government officials we're trying to represent the citizens of each of those 4 counties. In doing that we are concerned not only with the upper end of the Roanoke River and Blackwater River and other streams coming in, but are also concerned with Smith Mountain Lake, Leesville Lake, and concerned with the down river portion. Campbell County borders along the river below Leesville Lake so we as much concerned with that particular area as we are with what is called the Project being the 2 lakes created by the 2 dams. As I say, we've been following, trying to participate and in least 13 different areas of exploration as to what should go into the new license. We hope that we understand what is happening over the past almost four years and we would like to learn from that and adjust wherever we can to the operation of the Project for the next 30 to 40 years whatever the license comes up. And this is our opportunity to try and get it right. So, we're very much interested in the input from all the counties that we're trying to represent and the citizens in that regard and trying to be as even-handed and open as we can not only with the citizens in the counties but also with the AEP company, because as you know, they're in the business to stay in business and we're not in the business to try and do anything that would adversely affect that.

Bill Brush: Well, good morning and thanks for allowing me to come down and visit with the Committee one more time; but, I have to make a statement up front. I am not representing Appalachian Power's interest, just in case there is a remote possibility at the end of this brief that you thought I was. I want to make sure that that is not the case.

When you enter a re-licensing process you're told this is your once in a lifetime opportunity to be able to influence the way this project will be operated for the next 40 years and that you should participate actively and be in that process because we need to re-consider what the new baseline for the project is. The baseline is today, it's not what it was 40 years ago in 1966. It's today and the power company is supposed to consider that new baseline in its evaluation of the project and its recommendations for operation. They recently submitted their license proposal to the Federal Energy Regulatory Commission on the 26th of March and this is now moved from the AEP part of the process into the FERC part of the process. Approximately 2 years from now we should see a re-licensing, a new license issued to the power company to operate Smith Mountain Lake most likely for 40 years.

I wanted to talk a little bit about the project baseline today and how that is different from what it was when it began. Smith Mountain Lake flooded I don't know how many thousands of acres of the 3 counties there. They basically took prime farm land and what has developed from that is everybody moved to the ridge tops around the project and there is not a lot of farming on ridge tops. Now we have over 16,000 residences that surround the Lake. 7,300 of them touch the Lake and there are 6,300 boat slips on the Lake. Over 25,000 registered boats are within a 25 mile radius of the project and that is important because a lot of the usage, as you'll see under the estimated recreational days on Smith Mountain Lake, come from public visitors. In fact, about 1/2 of all the visitation and the use of the Lake roughly are from visitors through either our public DGIF launch ramps or the commercial marinas that we have. Shoreline residents account for 2.7 million recreational days a year, but you got to think about something here. A shoreline resident hosts visitors, friends, and relatives. When you live on a lake you have a lot more friends than when you don't live on the Lake and you bring a lot of visitors into the area as well. We're probably evenly split is what I'm suggesting and that this is a project that addresses not only those that live on the Lake, but it also addresses many counties around the Lake. We have weekend residents that come from as far away as Raleigh and beyond and from Northern VA and on down every weekend. Lots of fishing in these 2 Lakes, good fishing, good fishery, and lots of time spent out there. Too much water and not enough fish, obviously that is why it takes so many hours.

We do have something I want to bring you up to speed on. Brian McCrodden is here from HydroLogics. HydroLogics has come up with a model of the entire Basin that models everything from Roanoke Rapids all the way up to Smith Mountain Dam or from Smith Mountain Dam all the way down. It's a "truthed" model. It uses all the inflows and data from the USGS gauges that monitor along the river, plus it incorporated data that AEP has provided. We did learn something from the modeling of this and that is the inflow data set that AEP has used to manage the project over the last 40 years isn't exactly correct. It was off by about 250 cfs. It also didn't acknowledge that the project has a leak. The project leaks approximately 300 cfs out of the project when the project is full. Not exactly sure where the leak is, but it does leak and it does return that water to the river, unfortunately it begins the return somewhere above Brookneal and the remainder comes in some place below Brookneal. It's a good model and I'd like to encourage its use. I mean, I don't want to speak out of turn here, but if you want to analyze the impact of

inflows, the impact of withdrawals for public water, or anything else in this Basin, this model would give you the mechanism to do it, with understandable graphics. This maybe something you want to consider as a Committee. Another thing accomplished during this re-licensing is that the entire Staunton River from Leesville all the way to Clarkton was analyzed, studied and modeled and characterized in terms of what the river bottom looked like, what the depths were and so forth and it evaluated the habitat along that river to give us a picture of something that really hasn't ever been studied before. So that is 2 benefits out of re-licensing.

What I want to talk about today is the problem with trying to come up with balanced release mechanism and how to allocate water. What we've talked about at the TCRC and the Smith Mountain Lake and the Water's Edge Homeowner's Association, and in several of the committees, how do we do this in a way that provides the most benefit? We have a real issue on Smith Mountain Lake with water levels just like any project does and we have a public safety issue that I'll elaborate on later. We put that at the head of our list; but, right behind that we have a habitat and a fishery issue not only within the project, but below the project. There is also a growing need for water in the Upper Basin. The Regional Planners from as far away as Roanoke County and around the area have determined that 40 years from now we may need to withdraw 25 million per gallons per day from the project to support the surrounding industry, and growing community. And then last on the list, but it's very important, is how do we augment flows for downstream recreation and still keep the water levels at Smith Mountain Lake at reasonable levels for recreation? This is a challenge.

There are 2 points I want to make on this graph. As you can see there is elevation on the Y axis, the left hand side of the graph and time across the bottom or X axis. This is an extract from AEP's Water Management Plan, which they're proposing, called HL8. You can't really see the colors here on the screen, the very top color is actually yellow and the color below that is actually sort of a salmon color. What I wanted to point out is that when water levels start to fall into this yellow zone and below, we transition into a less safe situation on the Lake. Basically, when water levels get down to 791 or 792 feet in the project we start to see our recreation at the Lake essentially stop. Public safety is an issue and I'll explain that a little bit more. You'll notice a green line in the year 2000 that is the point where Appalachians' license was modified to allow DEQ, Water Resources, Terry Wagner and Joe Hassel to grant short-term variances for reductions in releases. Before 2000 only the FERC could grant a variance from required releases. We all had to go to the FERC, you'd wait for a while, and you wouldn't get an answer right away. Now it's much more responsive. But look at these 2 curves, one the black line is the Lake elevation as it's been operated since 2000. Look at that and then look at the blue line and you'll see very little difference between the two. My point with this is, despite the efforts that the Lake Association and TCRC put into this effort, we basically ended up with the same release mechanism. I want to say why that release mechanism today is probably not the best.

First of all, one of the things that we're very concerned about hasn't even been considered in this license proposal, public safety. We have at Smith Mountain Lake all

volunteer fire department with 7 boats. Three are ISO Certified by the insurance institute. It actually reduces fire insurance rates, because our lots do touch the shoreline and this all volunteer staff of boats is dispatched by 911. Marine fire is the first responder for any structure fire within 1,000 feet of the water. For any collision on water it's there and believe me, it's there 1st because we don't have enough Game Wardens on the Lake. Probably you have the same issue at other lakes, that DGIF is understaffed, because of funding or the use of funding. These VFD guys are there 1st. When there is a collision, they're out there; when there is a fire they're there. They're also the only HAZMAT Response Team on the entire Lake and respond if we have a spill, a boat sinking, or something else. They're the guys that are trained to go out there and do that and they also support all the land-based units as sort of a tanker refilling tanker trucks with project water. At the peak of the season Marine Fire is protecting 54,000 residents and visitors during that time. They came to us and they said, "Look when water levels on Smith Mountain Lake, that is the actual level on Smith Mountain Lake drops to these levels, our mission begins to degrade. It's more difficult for us to react, to respond and by the time we're down at 790 ft., 5 feet down from full pond, it's an extreme risk for our volunteers to be out there on that Lake. And we went to the United States Coast Guard Auxiliary, which has 17 boats that patrol the lakes on the weekend, primarily and during the week for boater safety.

The US Coast Guard Auxiliary just can't make the statement, they had to go all the way up the chain to their division commandant and get permission to make their statement and they said, "You know, this is actually very true. There is an impact here and in fact, we don't put our boats on the Lake when it's down 4 feet, 791 ft., because it's too dangerous for our volunteers to be out there."

I'm going to show you some pictures just to give you an idea of what we're talking about. That is one of our navigation markers. We have probably the most elaborate navigation system on this project than any place in the country. Something like 153 of these lighted markers in this project. If you turn to the left here, you'll head down towards Charles Poindexter's house on the Blackwater River. If you turn to the right, you're going up Gills Creek. This is Lucky Island. This is, as the sign below says, a heavily congested area. Water level's down 4 ½ feet and this aid, even though it's lighted at night, you cannot see these shoals over to the side here and boats are crowded into this narrowing passage to the right.. This is one impact.

Next you'll see sort of a brownish shoal across there, lake levels down 4 feet at this point in time. This is an unmarked shoal. In the day you see it, you wouldn't drive over that. Anybody that drives a boat on a lake at night won't see it.

Here's the navigable channel. We're looking down the Roanoke, the main channel from Bayrock Marina, which is at the northern most part of the Lake and that is a redimentation deposit in the main channel. We're not going to talk about sediment today, but you can see that sediment deposit is normally covered with about 4 ½ feet more of water, you don't see it at all, there are some markers on there to guide you away from it, in fact, I think you see 1 or 2 of them floating in the front to keep you away from it; but

again, when the Lake drops, channels narrow and now boats coming both directions are forced into a narrowing channel. There are no boats in this picture and that is because I took this photograph on the 9th of September last year and Bayrock Marina boat slips were high and dry. No one could get into the water from Bayrock nor purchase gas from Bayrock Marina. They were out of the business from the 9th of September, actually from the beginning of September, until about the middle of November. Water depth wasn't enough to support their renters. Those renters are not owners or residents of Smith Mountain Lake, they're from Roanoke County, they're from Salem, they're from Roanoke City, they're from the North, they're from Pittsylvania County and all around the Basin they come to use the Lake.

Second issue that I wanted to talk about on that chart is obviously and this is maybe more pertinent to this group than anything else is, we have to maintain a healthy fishery and we need to maintain clean water and a good habitat, both in the project and down stream. I'll say this, AEP did an excellent job. Their consultant studied this habitat down stream and modeled it. It's called the IFIM Study or Physical Habitat Simulation and analyzed the amount of habitat available for a variety of different species and different flow rates. What happened? I'll just say that the River naturally varies in flow and that flow values translate not only to level but also velocity through the River and velocity is a critical characteristic for some species, especially when they spawn, cover that a little bit more. But at Brookneal, what they've determined is that 500 cfs of flow will wet the River bank to bank. The River is basically not full, it's shallow at that point, but it's wetted bank to bank and that was an important number to reveal out of this. But as good of job as AEP did studying the fishery and the habitat in the project they did worse job of trying to understand how that relates to the project. We've talked about safety so I won't bother with that again. What happens to the littoral zone where fish spawn? We have smallmouth bass in here and they are nesters. What happens to their nesting habitats if the Lake is down 4 feet? What happens to the wetlands, if there really are any wetlands on the Lake? The Corps has never designated any, officially, but if there were wetlands on the Lake, as AEP claims there are, what happens to those wetlands during these times? Shoreline erosion, I'll show a picture that explains that. We have armored our shoreline with riprap to protect it from eroding because of boat wakes and wind. What happens when the water levels drop below that riprap? What happens now to the shoreline? And, unfortunately, this year or last year, we discovered hydrilla in the Lake. Probably somebody from Lake Gaston visited, no, I don't want to say that. But something hijacked into the Lake. The year before we thought we had found Brazilian Elodea in this particular area, they look very similar. We treated Brazilian Elodea which likely was hydrilla and we didn't know it, okay? This next year it expanded to 140 acres and part of the reason for that expansion was we didn't have a lot of rain so the Lake was much clearer, you could see deeper into the Lake and it was shallower and believe me that causes an explosion of this type of vegetation and we're struggling with how to manage this. TLAC is in fact, is struggling with that right now along with AEP.

I want to show some charts and believe me I'm not going to make out that I'm some ichthyologist biologist that knows all these things, but this is an output from the final in stream flow study and I just want to show you what this really says. On the left-hand

column or the left-hand Y axis is Weighted Usable Area which is basically habitat and it's measured in square feet per 1,000 feet of river. At the bottom is discharge or flow rate. This is the model that was done for the River basically characterizing the River from Leesville all the way to Clarkton for striped bass. And this curve says that, striped bass prefer higher flows, the higher the flow, the greater the amount of habitat that is available. There are 2 little balloons to show you when we do our spawning releases, basically from the 15th of April to the end of May that is the median flow at Brookneal during that time. So, in April 50% of the time the flows are greater than 2,500 cfs and 50% of the times the flows are less. When you get into May, now the flows are greater than 2000 cfs 50% of the time and less than 2,000 cfs 50% of the time. But, typically these are our wettest months. This is when the highest flow is in the River, as you all know. It's April now and we have good water levels down here, too good maybe. We also know striped bass is not the most popular game fish in the River. It is the most popular game fish in Smith Mountain Lake and probably Kerr Reservoir, but it migrates up the River to spawn. In order to be successful it needs a sustained flow to suspend its eggs, because it's a broadcast spawner. Their eggs, those fertilized eggs must stay afloat in the water column or else it's an unsuccessful spawn. This natural spawn basically fuels your striper industry on Kerr and because of the hatchery in Brookneal, it fuels our striper industry at Smith Mountain Lake. Very important, very important fish.

The 2nd most popular fish in the Basin to fish for in the River, according to the surveys that AEP had conducted, is the small mouth bass. You can see now, small mouth actually prefer much lower flows than stripers. They peak at around 750. In fact, if you're looking at the spawning curve, they like to see flows below 500 cfs. Now, I don't want to mislead anybody and think that the River is one continuous thing, it's different all along its reach and there are different velocities and flows at various stages around rocks and the deep pools. But in general, this is supposed to be an analysis to show us that. Smallmouth's primary spawning month is May but they can also spawn in June and they can spawn a little earlier in April. But because we're releasing higher flows to attract stripers up river, smallmouth bass spawning suffers in most cases. But during a drier year, smallmouth would have more habitat available for spawning and rearing and so forth. So, there is basically a conflict, you know, stripers like more flow, smallmouth bass, and most other species like less flow for spawning.

Then you come to the most popular fish that is sought after in the River, according to AEP, that is channel catfish and maybe some flatheads now I guess they're in there. They spawn later in the season, June and July. They do prefer lower levels of flow for spawning but the catfish basically prefer a moderate flow, someplace between where striped bass prefer and where the sunfish and smallmouth prefer. So, it's complicated. I mean, flows are not dependant upon anything, we can try and regulate them, but different species and life stages prefer different flows.

So what did the consultant determine? These are his words and basically he explains everything that I just did with the chart, but much more eloquently. He concludes, 'Because of these differences between life stages interpreting and using these weighted usable area physical habitat indicator graphs to make flow decisions can be very

complex. It sounds like a trivial statement, but it's really a very important statement that he made. You just can't base your decisions on flows, just on those curves, because there is no optimal point for all species. So, what do you do? Well, the rest of the world, I'm sure I'm going to get a 'Boo' when I say this, says, You ought to follow the natural hydrograph because that is the flow that nature put out there, that originally put these species in the Basin and this diversity is absolutely essential.

This is a photograph, which is a plot of what the natural hydrograph looks like at Brookneal and you can see, most of the time the flows are well above the 1,000 cfs during this course of the record. But there are a significant number of flows that fall as low as 250 for short periods of duration, but generally are well above 500 cfs.

Why mimic nature's flow regime? Because the scientists, their organizations, VA Tech, any academic community tells you, in order to sustain that environment you need to do it. You need to be bio-diverse, and natural flow variation is the way to do it. Honestly this is amazing, scientists say, when you talk to them, we don't know how to do it any better than this. We don't know what happens when you change a flow variable, what that does to certain species or something else, or what it does to a section of the River, so let's not mess with it, because we don't understand it, there are too many variables to consider.

If you're interested, you'll have a copy of this briefing, but here are just a few of the references. You can look at the bottom one which is a case study Nature Conservancy's Sam Piersall did on the Roanoke Rapids Release. You'll also note that Dr. Angermeier, the USGS employee assigned to VA Tech, that is the expert on Roanoke Logperch authored recently in 2003, in an ecology publication. So, there is lots of evidence out here, there is lots of support for this mechanism.

Next point, we think that the re-licensing proposal for water management probably has addressed this need for public water adequately. What this does though, it says, 'We're going to model it to pull out 12.5 million gallons per day', that is the cfs equivalent. If we assume that 50% of that water would be returned to the project or the Basin that that is the equivalent, you could draw out 25 million gallons per day on average. Nobody knows if this number is ever going to be reached, but it's our best projection right now. As John said earlier today in the discussion, we want to make sure that we document what water needs we have in this Basin for the residents of the Basin so that those resources are available when they're needed 40 years from now, and they're not necessarily being consumed outside the Basin. I know you're going to be discussing that later. Returning 50% of this water to the Basin, that is a challenge for the rural counties of Franklin and Pittsylvania. That is going to mean they're going to be installing sewers and water systems. In actuality from a resident's perspectives, I think that is a probably pretty good thing to do when we're talking about future growth, but it's expensive and it's something that all the counties are going to face.



These are some photographs that I wanted to show for those in the Upper Basin that are really not familiar with the Downstream Hale Islands Reach, which is the scenic river that everyone's concerned about. On the slide, on the picture to your left, to the left of that picture is Campbell County and Halifax County is to the right. This is the braided island complex and just above this complex is the Long Island Park or River Park from which many a canoe enters the River, goes through this reach, all the way down to Brookneal, about 10 miles downstream and pulls out. I've got a red X on the entrance, approximately, to the Mill Race Sluice that has been blocked for the last 20 years with a log jam. It's also the deepest water and the easiest way to navigate around the rocks, which are boxed in this red area here. Really it's a natural ledge that just blocks access into the River. Two pictures of that are shown to the right, entering channel 2. This is what the entrance looks like at the very top when there is only 700 cubic feet of water flowing through that channel. By the way, the stage says 6.24 feet. That is the gauge at Brookneal which tells what the level is at Brookneal. When you increase the flows by some 300 cfs that is what things look like entering this channel with a canoe. I think that photograph you see over here, that individual, that is a DGIF employee. I think that is Bud Laroche in the front of the canoe entering this. Note that the stage of the water changed about 4/10 of a foot, with the increase in flow. What that difference equates to is the ability to not have to portage your canoe, but rather to be able to navigate your canoe through that red-boxed area here that we're talking about.

I have some other pictures to show what that looks like. Now the 695 or 700 cfs number, there is a gauge at the Long Island Bridge that crosses the Staunton River at that point that says that if the water is below that 700 cfs you can't canoe. If it's above it, you know, there is a gauge there that tells you what the canoeing would be like, the higher the flow the better the canoeing. That is what it looks like at 695 cfs.

This is what it looks like with 1,000 cfs. We have an increase in flow, probably an extra of water in the River. It's still very clear, it's easier to navigate at that point in time and fishermen prefer this flow. They prefer the low-flow or the mid-flow because at the higher flow it becomes chocolate colored.

That is it starts to have sediment is in the water The rocks are still there, but right now he water level is up. You've probably got about 17" more of water than you had at the 695 level. This makes navigation through there simpler. So the boaters or the "canoers", there are no power boats in this section, prefer the mid and the higher flows for canoeing because it's just easier and a more enjoyable experience. The fishermen, the waders, and the swimmers kind of like it when the water is clear. So it really depends on what kind of recreation you're talking about as to what level you like. Read Charlton asked where the braided islands are in relation to Long Island. Well, the Long Island Park is right above it. The town of Long Island is right above this entrance here. Bob Jean stated where the sluice is right there is the Long Island Ruritan Club. We opened that up and took bateaus through there about 20 years ago. Now bateaus can't go through there. Right, because of the shallowness of it. That is why it was built. Right, exactly right and you can see some of that logjam right now that is causing it. I think, right there at the far right of your picture, you see some logs laying there, that is pretty much where the entrance to that

path is. We'll come back to that and some recommendations as to what we see is a good way to balance this.

Now we have talked about the recreational problem for the River, let's talk about the recreational problems on the Lake. This is an overview of Smith Mountain Lake and Leesville Lake. You can see Campbell County there and the 3 counties that surround it, Franklin, Bedford and Pittsylvania to the South.

You see that we have 6 boat slips, public boat launches, on Smith Mountain Lake which includes the State Park. Now, for each of those boat launches, the land was leased to DGIF and they spent, I think, \$800,000 of State funds to build these launch ramps when the project was first opened up. The end of the ramp was measured and you see those depths at 787 odd ft. and so forth. That is the depth at the end of the ramp. Full pond on Smith Mountain Lake is 795 ft., so some of these, some of these have quite a bit of depth. Make the assumption, and it's a valid assumption, that you need 3' of water at the end of a ramp to get your boat off your trailer. That is a reasonable sized boat, not necessarily a jet ski, but it certainly is for, let's say a boat that is 18' or bigger, you need 3' of water. When you look at the probability of that happening between Memorial Day and Labor Day, since 1995, that tells you how much access those slips really had during that season. So, we have a shallow slip, for instance, at Scruggs. That slip was only available 55% of the time, whereas the Hardy Ford slip was available 90% of the time. Ironically, AEP is proposing the dredge the Hardy Ford boat slip because there is a huge sediment deposit that also further blocks access up there. The availability, you know, changes depending on depth. Certainly this could be fixed by extending the ramps in some cases. It may be possible to extend them, to give even more depth. Again, I point out there are about 578,000 visitor recreational days, annual recreational days accessed through these ramps.

This is what it looks like at one of those public launch ramps when the level is at 791 ft. This photo was taken by John Lindsey, 3 or 4 years ago, I think back in 2001. You can still get gas. There is still enough water at the other side of that dock to get gas, but you can't launch a boat of that size off that ramp at this point in time.

This is the Hardy Ford launch. That is not a real line, but rather a red line that I put on here to show you where full pond normally is. Here it's down about 790.5 and if you look, you'll see a guy's head on the other side of the pier. He just launched a jet ski. You can still get jet skis in the water. I know everybody that lives on the Lake just loves jet skis in the water. It's your favorite toy. That was a joke.

More public access is provided through the privately-owned marinas and that estimate is about 1.75 million annual recreation days per year. Some of these marinas and I explained Bay Rock earlier, when their water level, when the water level is 4' down in the Lake, they can not launch any boats or service any gas. Since 1995, during the recreational season, this is between Memorial Day and Labor Day, they see a loss of about 12% of those days. Other marinas, there are 29 of them on the Lake, are also impacted. We have boat lifts that actually lift boats out of the water so you don't, have to wash the bottom. The design is limited by not only Appalachian Shoreline Management

Plan, which says you can't put a dock any further out in the channel than this and you can't dredge anymore than 6' of depth underneath of it. Basically if you have an optimal lip where you actually have 8' of water underneath of it, the lift design is such that you can get your boat off the lift when the Lake is down at 790'. How often does the Lake hit 790'? 5% of the time during this period of time. That is not a lot, it sounds pretty good, and it is pretty good. But now when you figure the dredging and the Army Corps of Engineers has set this threshold to 6'. All of a sudden anybody that has a dredged slip, 30% of the time the Lake is going to deny you access from your boat during this period of time. And private access, same thing happens with the lifts and so forth, lift design and so forth. So there is a recreational impact. What I want to point out with these slides is the impact of water levels at the lake on recreation; to illustrate that, here are some pictures of marinas.

That is Lumpkin's Marina in the 2 pictures at the side. The water was down 5' and that is what their marina looks like then. They've lost lots of boat slips and a lot of people couldn't get their boats out nor can they get to these docks. Bay Rock is at the very top, that is with the water level down about 2 1/2' and they just recently dredged around there so you can get to that gas pump on their dock. And Crazy Horse, on the Black Water arm of the River, this is what it looks like when levels are down 5'. Now you say, well, jeez there are still boats there, well there are boats, but you got to look at those boathouses when you go across there and you've got to walk up 5', there is no ladder there. They could fix that. There is also a restaurant there that you can sit in, it's a Mexican restaurant, Mexican Viejo, and that is the good time, you go over there, have a margarita in the early evening and you watch all those retirees from Smith Mountain Lake pull their boat up and struggle to get up to that dock. Husbands pushing up wives; wives pushing husbands up. It is entertainment; let me put it that way.

What happens to private access? Now here's a home on the south part of the Lake, probably down in the Water's Edge subdivision. There is the dock and that is what typically happens. Right now at that dock, the boat can't get off that lift. You also can see the other point I made earlier about the riprap. You see the riprap armor up there? When it's down 5' that whole shoreline now is exposed to wave action and so forth and churns the sediment up and clouds the water and actually continues to erode a little bit. So private access is also impacted.

Even our best Fire Boat Captain coming back on a call one night 3 years ago, ran aground on the shoal. Parked it because the water had dropped further while he was out on the call and it continued to fall all that night and that was what it was like in the morning when they came back and lifted it off of there and put it back in the water.

So, let's talk about how we balance this. This is a chart. Please ask a question if I don't make this clear because it's difficult. The bottom is the probability, the amount of time or days that availability will be 90%, 10% or whatever. On the chart is the flow at Brookneal that we're really looking at here. Canoe 0 occurs at 700 cfs, so you can get through the island on your canoe, maybe with some difficulty, but you can get through and into the channel and down the stream. HL8, the way it's been developed, will

guarantee 88% of availability during the summer months, Memorial Day to Labor Day, that you'll be able to float your boat and go down to Brookneal. The natural hydrograph, however, if you looked at that, would tell you that in June the availability, if the Lake was releasing what was coming into it, following the run of the River operations natural hydrograph, the availability would be 86% and by September availability would drop to approximately 58%. So I want to make this clear that the project is subsidizing or augmenting flows down stream to make this possible during these dry periods of time. There is nothing wrong with this, and we think this is an important attribute.

You are looking at Smith Mountain Lake recreation now. We're going to be looking at lake elevation on the Y axis and the probability of water levels during this same period of time between 1995 and 2007 during the prime recreation season. The Lake is at full pond very seldom, maybe 40% of the time. Someone asked what is 'full pond'? 'Full pond' is 795' on SML. So, there is a transition zone that is supposed to be yellow that 1st biggest box that goes out to 30% or so. This is the time dependant upon inflows to the Lake and AEP's power generation desires. When they generate power they have the ability to drop Smith Mountain Lake actual level in the upper reservoir 2' in 10 hours. It takes them 30 hours to refill that when they pump it back from the lower reservoir, but they have the ability to drop it. Typically they drop it a foot, foot and a half, during their generation periods throughout the week. But when we get into that area, we start to see worst cases, they pull it down and we're down at 792' and we start to have some problems. There is a transition and it's not specific and it can't be measured because AEP's power operations are dependant upon rates, wholesale rates of peak power. But theoretically we're seeing impacts on the Lake and recreation worst case 31% more likely 20 to 15% of the time we're starting to see problems on the Lake that impact safety and recreation. So, with 88% availability of canoeing in the lower River and we have, you know, maybe 80%, 85%, something in range of availability on Smith Mountain Lake.

A better way to look at this is the way the project's really operated and this is the closest thing that I could come with to a guide curve taken from the Brian's modeling results. If you'll look at the 1st column that says 50%, that is the median flow at Brookneal during these months, the column that says augment, that means that 18% of the time in January Smith Mountain Lake project is releasing more water than what is coming into it to augment flows or whatever down stream. The 57% number under the "aligns" column says we're releasing, we're matching our outflows against our inflows. We're pretty much following the natural hydrograph. And the last column is where we're releasing less water than what is coming into the project for the purpose of recharging the project levels or raising them. And you can see a very clear pattern here. Typically the way the project has operated over the last 40 years is that during January, February, and March we refill the Lake to full pond. We try to, okay? You can just look at the percentages in the column at the left. March is an extremely important month to recharge the Lake because 95% of the time we're trying to charge it to get ready for striper spawn release around the 15th of April. April is a very high flow month, 50% of the time it's 2,500 cfs or more flowing through Brookneal and consequently we're not augmenting any flows down stream during April. We're pretty much following the natural hydrograph at that point in time and even sometimes there is so much water we can actually, if the Lake

needs to be filled some more, we can actually fill it. SML can only be filled to 795 because we have spill ways at that level and if we try to fill it above this level water just runs over the spillway and into Leesville Lake. But beginning in May as we get further into striper spawn, 65% of the time we're augmenting and 25% of the time we're following a hydrograph and if there happens to be a lot of water coming in, we might even recharge if the Lake is down. But the pattern here is clear, fill the Lake in the winter, draw down the project during the summer. Normally, under this pattern of flow, we generally see our lowest Lake levels appear in the months of September, October, and November. And for the most part our recreation season for the boater, let's say the water sports guy, the boater, the sightseer, ends in October or early November. People start to put their boats up, but bass fishermen and fishermen, you know, they're crazy, they're out there all year long. I don't know if they're crazy, they're dedicated, let's put it that way.

So, what are we recommending here? Well, 1st of all to address habitat concerns I have to recommend that we follow the natural hydrograph as there is no better plan. And in order to do that, we've asked AEP if they would consider moving to a continuous release from Leesville. They say, no that is too expensive, we can't do it. We still want to pulse our releases. AEP is required to release continuously 60 cfs of water, not a lot, but 60cfs. Every 2 hours they generate power out of Leesville and if they want to release 650, they generate power for 18 minutes by releasing 4,500 cfs of water. So it goes from 0 to 4,500 cfs for an 18 minute pulse and then they shut it down. When they generate the river rises 5.5 feet at the base of the dam and you can watch the wave flow toward Altavista. AEP has come back and said, we'll generate more frequently; we'll do it for 9 minutes every hour. And we're saying, you know, that is still not good enough. You ought to get a continuous flow generator and generate that power continuously. We're only talking about a 25 mega watt generator there, it's really inconsequential, to the revenue that Smith Mountain dam generates at peak rates. Smith Mountain dam generates 586 mega watts of power at peak rates timed perfectly to coincide with CA needs power. Those guys out in CA, they pay anything. Read Charlton asked how old are the generators at Leesville? They are 40 years old and we're hoping and we're suggesting if you won't change them out now let 1 of them wear out and then replace it with a continuous flow. What was the reason for the pulsing again? They have no mechanism to release water other than to spill water by opening release gates. They pulse water and they go from 0 to 4,500 cfs for 18 minutes, which averages out to 650 cfs. Bill Reidenbach said the reason they pulse is because it takes that much water to spin the turbines. Right, the hydraulic capacity on those generators is 4,500 cfs. We say, go to a continuous release or at least try to get there as soon as possible and begin to mimic the natural hydrograph. In other words, follow the natural hydrograph down until we get to a minimum floor. The floor we suggest is 400 cfs in the summer, 350 in the winter. But, we also have a striper release that is very important. It's very important. It's important for your fisheries down here and it's important for our fishery at Smith Mountain Lake and throughout the State wherever they stock stripers. We still need to ensure that there is a reasonable striper release even in the driest of years. That is how we believe we can address habitat. To address safety concerns, we believe we need to look at the safety floor, what the level is on Smith Mountain Lake and if we reach 792 level on Smith Mountain Lake at a point in time, we say we should be at the minimum release to try to prevent any further drop. If that doesn't

work, we should go down to 791 and if we're still losing water at that point in time and they're not doing it, we need to match our inflows to our outflows at that point to stabilize from going below that because of public safety reasons.

This is the last slide guys. I'm sorry I took longer than possibly what I was allocated. In the river I believe that we need to continue and should be expected to release recreational releases down stream for those times when the natural hydrograph doesn't work. We do have water available in the Lake. We can supply not only the striper spawn, but we can create these artificial thunderstorms in the Upper Basin so that during Striper Festival and Memorial Day, Float Day, 4th of July, Labor Day, we can have 850 cfs of flow going through Brookneal so that you have reasonable, good canoeing. And how could we do that? We do this when our actual project levels are above 792'. Starting with Memorial Day, if we released 650 cfs out of 2 days on a weekend the project would only drop a little lower than a 1/2 a foot .62' over the course of the recreation season. So, we can clearly do more and clearly we don't have a summer where the inflows are always at 400 or less, they're usually above that. We could go as far as 3 days a week doing that from Memorial Day to the 15th of October and the project would drop maybe .93', absolute worst case. So there is plenty of water to supply and make sure that we have something down stream. Where the problem comes in is when we're expected to release or the Lake's expected to release and augment flows continuously through that period. We'll drop the project 2 1/2' and we have a problem with safety at that point in time. Now, it was pretty obvious, and I don't want to sound like I am from up stream. I do support these project releases down stream, there are people that don't, just as there are people that really could care less about the water level in Smith Mountain Lake, it's an emotional topic, okay, we know that. But bottom line there is a way to do this and there is a way to do it better, protect the habitat, protect the fisheries, protect public safety, and still have good recreation down stream. And there is another way and we're behind this. Chuck Neudorfer was saying that we believe that we're not just about project re-licensing; we're about the lower river. The Staunton River, a scenic river in VA, has pathetic access. There are very few points where you can put in and get out with a canoe in 4 hours. That Mill Race Sluice, if we clear that logjam, that water in that Mill Race Sluice is approximately between a foot and 2 foot deeper than the other channels. That means you can always get through the islands if we just simply clear that sluice. It needs to be and some of the folks down stream say, you know, AEP did that. They're the ones who release these huge pulses of water and they're the ones who put the trees in there. We are willing to go to bat and say, AEP go down there, 40 miles below the dam and clear that jam out that you caused. I think that is a reasonable request to them. Of course, AEP has a different idea as they don't believe that is their problem. Bob Jean stated that on that log jam, if they keep it up, it would be very little cost. Right. We cleaned it out once and what it amounted to, we had a timber company to lend us some skidders and we just hooked chains and pulled those logs out of the river and but, it gradually builds back up. You get one and then another and . . . But if it was an ongoing project it wouldn't be all that expensive to do it. It's just at the head. The whole thing is not jammed up. Right and it's easy to canoe through too. But we have in Franklin County, one of our employees, Scott Martin's Deputy County Administrator, he's got a contact with Navy Seals that want to come in and blow that. I'm serious, they love to blow things up, they practice,

and they'll come in and blow that thing, for no cost. We tried. We can, we can, probably make that happen. And we believe that river access, you know, think of Leesville, you go from Leesville to Altavista, and that is a 10-mile run, Goose Creek is between Leesville and Altavista, we believe there ought to be an input and an output place on Goose Creek so you can leave Leesville, get out at Goose, get in at Goose, go to Altavista and to Taber and to Melrose. Okay? On that river besides that sluice that scenic river portion of the Staunton River is on the National Register of Historical Rivers. The wing dams and the sluices and things that were put there by Samuel Pennel in the 18th century, or soon after are still there and still used. It's the only way you can get through some place, like to fish trout. I think that is what I think they refer to down there as the little river channel, the bateau passage in the south channel. That is why we cleaned it because we took bateaus down and could not go through the old way. Right. Read Charlton asked when is Float Day? Float Day is, I believe, in June, June like 22nd or 23rd. Bob Jean said striped bass festival is in May. And so what we're saying is, look guys there is enough water in the project to protect drinking waters, to protect safety on the Lake, protect the habitat and the fishery if we follow the natural hydrograph rather than trying to re-engineer something. Believe me, you can't re-engineer biology. You can re-engineer buildings and I can tell you how to clear out those rocks blocking channel 2. We could make it 20 feet deep there if you wanted it, but that is not what anybody wants to do. But you combine those releases with those river access improvements and we've really, truly enhanced downstream recreation and we haven't hurt anything upstream. I mean, it's so obvious; it's beyond me why we can't get AEP to understand this. Someone asked where does AEP stand on this? The AEP's submitted HL8, they submitted it for a 401 Permit with State Agencies in VA. Without these recommendations? Without these recommendations. State Agencies that have endorsed HL8 say, yes that it is the best possible thing we can do. We disagree with them. We don't agree with our State Agencies. Terry knows, I mean, no surprise there. We're trying to put together this argument and Brian has agreed to model this using the HydroLogics simulation so we can compare the performance of this versus that and hopefully we can arrive at some balanced approach that keeps the up streamers happy and the down streamers happy.

· Bob Conner stated we all have an interest in Roanoke River Basin you know. A lot of folks would like the whole pie, but I think it's at a point that if everybody can get a slice of the pie we'd benefit the whole Roanoke River Basin. Got to be a lot of take and give. My question, when you mentioned safety, I understand about the safety, but when I think in terms of safety over the years in my profession is that as I vision the Lake in addition to the things that we're discussing now, we have a water safety issue on the Roanoke River Basin. I'm including it all the way down, is that you can put a boat out there, used to be you had a 35 horse power, 40 horse power, well that was probably maximum, now you can skid down the Lake at 80 to 90 mile an hour and nobody has any respect on the speed on the Lake and something has got to happen out there, through Corps of Engineers through Coast Guard through Game and Inland Fisheries to start putting more patrols on the boat. We're getting more accidents every year and that is one of my major concerns. I think all these other things will work out, but it's like putting a live grenade in your hand and says open it up and go and we're not addressing that issue at all. Bill Brush replied you can buy a 215 horse power turbo charged jet ski for \$10,000 or less and you can do 75 miles an hour and you can put that in your 16 year old son's hand and turn him loose.

So, there is an issue there, but we worked that, Charles worked that really hard and the best thing we came up with last year was you're going to have to have a boater safety course. Well that is fine with boater safety, but if the interstate says 65 miles an hour, that is the speed limit and you got to have speed limits. People will disagree with me on that, but you got to have speed limits and you got to have regulations more on the boats on this Basin and I think that is something we need to address. Chairman Poindexter said the problem with the legislature wasn't necessarily with the regional legislators last year or year before or this year, but with the rest of the State. We pass laws for the whole State generally. They don't want to exempt out 1 lake or 1 river basin, I mean, you get into big open waters at the Bay and the James River then we're seeing that what we need for safety doesn't apply there. That is what the real issue is keeping this one from getting resolution. Bill Brush said we don't have enough Game Wardens on the Lake and you probably don't have enough down here either. If all the revenue that was collected through boat fees and new boat sales and all that stuff was dedicated, given back to DGIF, we would have solved that problem. That we have fixed now, all of the tax is now going to them. Terry Wagner said just a real brief comment, I'm certainly not qualified and have not been involved in the details of the development of the proposed release from the dam. I would like to point out to you that if you noticed that was HL8. That is not just an accident as that is the 8th effort to reach consensus in a large group. There has been significant effort to try to reach consensus in what an acceptable release protocol for this project would be. That is not passing any judgment on whether the current protocol is acceptable, could be improved, or, it couldn't be improved. I just want to make sure that the group understands that this isn't the 1st whack at it, there is been a sub-group that has been involved in producing this, trying to reach consensus between all parties for an extended period of time. Bill replied even 2 years before that we started. I have to comment on this. I can say a lot of things about AEP, but one thing I won't say is they're stupid. When State Agencies (which can condition the license and have the power to actually block a new license, and determine whether or not AEP gets a 401 Permit) are telling AEP they need more water for fish, and more water for down stream recreation, AEP listens. I'm just telling you that State Agencies are not equal to local governments. They have a power far above our local governments and our local citizens groups and if I was AEP, I'm not, remember I told you that, but if I was AEP I'd listen to exactly what I was told about fisheries and about recreation down stream and that is exactly what I would design and that is exactly what happened during this 8 iteration process. Our issue right now is to work constructively. You know, you've just got to beat your head against this, you've just got to keep working it and hopefully come up with something that is going to be better and more acceptable, and we're committed to doing it. Read Charlton asked could you explain again the HL8 iteration. Terry said there was a HL1, a HL2...and so forth. When was HL1 established? 17th of July. HL2 I think was the first time we did this, but 17th of July 2007. Bill Reidenbach said let me tell you how we got from HL5 to HL6. DGIF submitted directly to AEP with no vetting or no discussions minimum flows that they needed for fish habitat. A new iteration appeared. Bill said look, State Agencies have responsibilities. Look these people are good people, nobody's saying these people are bad people but we have different agendas. We believe, obviously, I wouldn't be standing here telling you if I didn't think this was a better idea than what we got with HL-8. My basis is that is trying to engineer a better flow regime for the



Roanoke River than the natural hydrograph is a fools' folly. That is what science is telling us. But trying to provide additional releases so that people can enjoy the River and better access on the River, that is not a fools' folly. That is a reasonable objective and is a good thing for not only the economy for river communities, but it's a great thing for the economy at the Lake as well. We can create the artificial thunderstorms we need to. That is really the whole basis here. So, I know, I don't want to tie up the meeting any longer, I'll be more than happy to talk with you offline. John Field said Bill, I have a question. The minimum releases that are coming out of AEP Smith Mountain do meet riparian law, do they not? Yes, I believe so, I mean, they've been approved. The minimum release right now John is 650 cfs . . . That would be the low flow of record . . . No, we've actually gone below that . . . We've gone to 250 cfs. . . I mean riparian law says you have to release a certain quantity which is at least equivalent to the low flow all the downstream users that have the benefits that they would normally accrue. Well, for instance, this summer, let me answer that question this way. This summer we saw flows before Terry and I and Shelton Miles and DGIF and DCR and Dominion Power got on the phone and said, I think we need to go to a temporary variance here, we extended a variance through this cooperative process from about the 15th of August all the way to, just about 3 weeks ago, okay? To try to regulate this, telling the FERC we can't operate on 45 day variances, droughts are not over in 45 days, we need to have flexibility. So we did that. We saw flows, in flows into Smith Mountain, this year, as low as 250 cubic feet per second. We were initially releasing 650, so there was a 400 cfs difference. Doing that continuously for a month will pull the project down a foot, and that is a lot of water. So we had this agreement, this DEQ Variance Procedure, which is a good procedure. Nobody was happy this summer because we didn't have the water resource to work with. We've seen flows as low as, down at Dominion, as low as 275 cfs in the river and pulled temperature and DO measurements on that and found that we were still within the State guidelines. So, we're not doing anything here that should damage habitat or kill fish, because that would be irresponsible, it truly would be. Chairman Poindexter asked Terry, has safety been a criterion that the State Agencies consider relevant to the question. We certainly take comments from DCR, which would be a primary agency. Let's back up a second. DEQ issues a VWP permit which serves as a 401 certification. In that process, we see input before we go to public comment from State Agencies. DCR would be the primary agency that would make comment regarding safety issues on the Lake or recreation, any recreational issues, including safety related recreation. Now the fire boat issue is a little different. I'm not sure that any State Agency really provides specific comment regarding operation of fire boats. . . Would you go to DGIF? Yes sir, DGIF was one of the commenting agencies. Yes, okay, but primarily DCR? DCR is the primary response. For boating recreation. For recreation, right. And not for safety.

Gene Adesso, RRBA; "Roanoke River Basin Association Update" · Well, it's my pleasure to be here, thank you for the invite. Roanoke River Basin's presence here is probably overdue since, as I recall, we were one of the driving forces at the round table that pushed for the formation of the Bi-State Commission years ago. Before I start on my presentation, I just want to add something to the enforcement problem and the safety problem you're talking about. I am president of Buggs Island Striper club which has 385 members. We just went through some fishing regulation changes that you might know of, and as a result we've been looking for a little more enforcement. Kerr Lake is a massive

resource and has very little enforcement. I was asked by our Board to take a look at analyzing the revenues that are drawn from fishing licenses and things like that and find out where that money goes. I did this analysis, getting the information off the website from the DGIF, their budgets and so forth. All the information is public information. Without the information in front of me I can't tell you exactly how it came out, but I can tell you this, the amount that went to enforcement compared to everything else, like education, fishery, studies, and all kinds of things is extremely small. Now, over a year ago I believe, and I wrote a letter to Ward Burton which said 2 things: 1) Here's the analysis I did. I hope its right. Please have someone take a look at it and if it's not correct tell me. 2.) If it is right, is there something we can do about this? I Never heard back. About 6 months later I followed up and still never got a response. I went to another meeting and one of our members in the striper club who worked in Richmond in a government office, said she'd try to find the right individual to address the question to. She came up with the name of Bud LaRoche's boss. I can't remember his name. I talked to Bud, I have a good relationship with Bud, as our fishing club enjoys a very good relationship with the DGIF and he said he would pass it up the line and try and get me an answer. I have not heard back as yet.

Okay, I thought I'd start out by just reminding ourselves by what is meant by riparian rights, the classic definition. I'll let you take a look at that. What I really want to focus on though is the last sentence in the 1st paragraph: These rights cannot be sold and transferred other than with the adjoining land and water cannot be transferred out of the watershed. This principle of riparian rights is written into VA and NC law. The problem is, and there are actually a couple problems as I see it, is that when the States take over the law they acknowledge riparian rights and say, we'll manage it. Then they set about by setting up the rules by which you can do it. Albeit the rules are stringent but they do not prohibit inter-basin transfer of water. They've taken the rights over, and declare that it's State business. Second point I'd like to make is that when you have 2 States involved in the same watershed the problem becomes even more intense.

So with respect to riparian rights, what are some of the threats? And there are more threats than these I think, I don't have them all, but I just want to review a few of them 'because I think they're noteworthy. Some are minor, but maybe not minor any longer. Let me talk about the 3rd bullet down there first. Dan River near Milton for Roxboro was under the volume in million gallons per day (mgd) that is required for an inter-basin permit. Basically they just had to go through the appropriate environmental studies and they we permitted to withdraw. It's a small of water, under the 2 million gallons that requires an inter-basin transfer permit. A permit probably is going to be allowed but it hasn't been asked for yet. If it is asked for and they do the work up they need to do, that might happen. The one that is problematic, even though I list it as small and minor, is Creedmoor from Oxford via Kerr Lake Regional Water System. Now the regional water system was formed by the cities of Henderson and Oxford. That in its self represented an inter-basin transfer of water because Oxford's in the Tar River Basin. So what we've got it water being taken out of Kerr Lake, and put into the regional water system. The permit originally, I guess, was given to Henderson, to the City of Henderson and water now goes to Oxford. Now Oxford is getting ready to sell the water to Creedmoor. Yesterday met

Tommy Marrow the Mayor of Oxford. He and I are old fishing buddies and I talked to Tommy about this. I asked him about the reason for that. He said Creedmoor is regarded as a sister community in the same county, Granville County, and they're going to send treated water back. They're going to provide a sewer service back to Oxford. However they're going to put it back in the Tar River not the Roanoke River, so it's still inter-basin transfer. And guess what the amount of water specified is limited to. 1.5 million gallons a day. Now I don't know where 1.5 mgd came from but it's awful close to that 2.0 mgd limit that you have to have to be considered an inter-basin transfer and require a permit. The water is going to Creedmoor from Oxford. Now I don't know what kind of permits they have to get to do that, but here's my problem. If the Bi-State commission can help, or you guys can help on this, we'd really appreciate it. We need legal work done to understand these permits. When an original permit is given to the City of Henderson they have riparian rights, so there is no problem. But does that give them the right to sell water to Franklin County? Granville County? And then have Granville County sell it to Creedmoor? Does the permit really allow that? I mean, their intake pipe is down at 280 ft. at Kerr Lake. That can provide a lot of water. They can draw down to 280, and not have restrictions on water during drought periods because there is plenty there for them and sell off to counties that are outside the Basin, sometimes 2 Basins. So I think we need legal work done on just what does that permit allow? Does it allow anybody with riparian rights to come in and go into business selling our water off? So that was one thing I would urge this group to take a look at. John Feild asked, Gene, is not the Kerr Lake Regional Water System doing inter-basin transfer to Franklin County, by way of Wake Forest and Lewisburg? I don't know the route, but it's a small amount, but yes, that is going on. Under 2 million gallons per day? Yes, under 2 million gallons. They didn't require a permit. Chairman Poindexter stated Gene, there are probably 2 parts to your question up there. First you need legal work to understand what is allowable under permit, you mean, there under current law and regulation. # 2 you're probably implying that they need some tweaking. Yes sir. Yes sir, no question about it. 'Because you're going to see more and more of this. John Field noted one other point, you had 2 snakeheads and the 3rd snakehead is federal ownership and operations. That puts it at another level wherein states cannot dictate to the federal government. Right. And that probably also needs to be surfaced in that the Corps of Engineers, in the case of Kerr Reservoir, within the parameters that are allowable under the water set aside for allocations. They could allocate that entire amount to one entity. Yes, I'll get to it, I'll get to it later, but the USACE position on state issues is that they're not involved in it. As a matter of fact, they really like the idea of a Bi-State commission because they don't want to get involved in it. There are too many states and that is their position clearly. So they'll give that allocation to anybody that requests it and has the right request, which has all the right studies done and so forth. They'll give it to them, they don't care who it is, they don't care what state it is. Bob Conner said you mentioned legal work. You indicated that this committee should look at that, can you clarify that a little bit more when you say legal work. Are you indicating that this committee needs to employ legal counsel to determine this? Yes, that would be very helpful. The Roanoke River Basin Association doesn't have a very big budget. I can tell you, ours is smaller. Yes, but the State of VA. I think that there can be some dialogue. We went through this thing with VA Beach and you were involved with the VA Beach withdrawals. The people that came out ahead of

the game were the lawyers. And if reasonable and prudent people can't sit around the table and reach some agreement on how they're going to do things or through our legislators to clarify some of these things, we are just throwing good money away. Attorneys are going cost and in the end you will hear we need to compromise this. Yes, I know exactly what you feel. My feeling with trying to get some legal help was to see, if tweaking can be done on the legislation, or could we get some sort of an injunction to stop it? How much do you think an injunction to stop that, look, I'm not being facetious...Do you recall the lawyer that we that we engaged for the VA Beach Pipeline, Pat McSweeney in Richmond? Yes. I called Pat last week and asked him to take a look at it and he hasn't got back to me yet. So, I got somebody looking at that. I don't know. I thought it would be nice if we could get a paralegal or somebody not too expensive, just to pull the documentation out and with kind of a lawyer's sense, look at all that and see if there is anyway there is some legal recourse for us. And if there is, then we can figure out how we can take it and what it's going to cost. Haywood Hamlet we spoke earlier of the Bi-State commission. We're all a group here and we've been here and as I said some of us are charter members. There was a VA Bi-State commission delegation appointed, and the citizen members are I and 2 other members of this board. Actually one is no longer on this Committee. But that is all we've ever done, we've never met, NC has never . . . We'll get to that. The major threat we see is the NC Triangle area. · I say City of Raleigh here because they're at the heart of it. What went on here, is in the year 2000, CH2M Hill did a study that looked at what all the alternatives were for additional water supply based on their population growth and demand growth out to the year 2020, I believe. One of the recommendations they made, was to run a pipeline to Kerr River and do an Inter-basin transfer of water. We met with them and told them under no uncertain terms it's not going to be easy as it would fought all the way. It is violation of riparian rights and other things. They also met with the Corps and the Corps at that time basically just talked to them about what kind of an allocation would be required. They didn't talk to them about riparian rights or whether they would support or block, they just told them what they had to go about starting the process. In essence and how much you're going to want and how do you start the process. In the year 2001 and 2002 we had a record drought in this area and during that timeframe there was a lot of talk again about using Kerr Lake as a water source for Raleigh. I was called by WRAL TV and asked for a comment and I gave them what you could imagine. They said, 'well, we'd like to come out and interview you', so I got my office all cleaned up, and I went down and put my best clothes on and they called me about ½ hour before they were supposed to show up and said, 'we're calling it off because we called the Mayor of Raleigh, Ralph Meeker and he said, that is no longer on Raleigh's radar screen. So I said, okay, I think I believe that, but let me just put it behind me here. The year 2004, the Bi-State commission was established after a lot of hard work by the round table group and I'm not going to go through the rest of chart because you all know this. There are 3 levels. It's been set up rather nicely in VA to form committees and they're meeting regularly. The NC Commission was formed, but no advisory committee meeting as of yet. I don't know if there is anybody in here today that can talk about why. I have my own ideas about why, but I don't know if there is anyone here that can talk about why. When I was asked about this from the news people, they said, you know, we can't understand this, during the VA Beach fight, the NC people were right along side of you, fighting against inter-basin transfer of water. Now the thinking is

that they don't want to declare, as you guys did, opposition to inter-basin transfer of water. And so the feeling is that perhaps they don't want to commit themselves because water wars are starting and they're going on already. They're going on between GA and TN. They're going on between SC and NC. They are headed for the Supreme Court already on that one. So, there are water wars going on and my feeling is maybe they don't want to commit. When asked why NC is not acting the only answer I can give is that it may depend upon which way the water is flowing. So I don't know what the answer is. Every time I ask, I'm told that we're getting ready to do it and the committee is getting to be set up. I was about 4 years ago called and asked if I wanted to be on the committee, I said yes, but I never heard anything after that. So where do we go from there?

All is quiet until we run into this exceptional drought and especially in the Neuse River Basin. Read Charlton asked is that going on right now? No, the drought is now moderated considerably with the rain. Phil what is the level we're at now? It's severe. Okay, severe drought. But it was at exceptional, and at that time a lot of talk, a lot of things were going on about, again, it's time to look at Kerr Lake as the source of water for Raleigh. These exceptional droughts and the problem that Raleigh had with Falls Lake are occasioned by no tropical storm relief. The previous studies on increasing supply considered demand by the year 2020 but they need a solution, in my opinion, a lot before that. Growth is unconstrained down there. The demand for water versus the supply during normal times, you don't get a lot of rain in that area during the summer and fall. It's a very dry season and the only way they've ever survived is with tropical storm relief. There would always be a rogue storm or tropical storm that would come in and fill the reservoirs. And so, what we do is don't stop growth or figure out what another solution is, but we just go out there and do a kind of rain dance for a tropical storm but we don't want the kind that blows a lot of wind and does damage, we just want the kind that brings us rain. And if we don't get it, here's what happens. The Governor ran a session and he told all communities you better look at your partners and your links that you set up, albeit most of them are inter-basin transfers of water, but you better look at your links and Raleigh turned around looking and they don't have any in-links. They got all out-links, they've just been making deals to give people water, they don't have any deals with anybody to get water. So, quite frankly, they're looking at, I think, desperate measures are being sought. And if they're not talking about desalinization someday then they've got to be talking about inter-basin transfer of water. So, again the media stated asking questions and I got engaged in the dialogue with the public utilities director that went something like this: I said, if you had 2 homes and they had 1 rain barrel apiece and the home, one of the homes had a lot of people in it and they were using a lot of water and the other home didn't and so we have drought and this home rain barrel starts to get empty, what is the right solution? Is the right solution to run a line over to your neighbors rain barrel and tap that water, or is the right solution, get yourself another rain barrel? They're retort on that is, you know, in the interest of being a good neighbor, if you have excess water and I'm sure at that time we really didn't have excess water, but if you have water or there is some unallocated water, good neighbor ought to provide his neighbor with water. My retort back to that is, yes, that is fine. But when a good neighbor lends something to his neighbor it is usually returned. So how about 2 lines, 1 up and 1 down? Why is the pipe always going one way? Alright. The next retort I get is something like,

taxpayers of NC helped pay for that reservoir, it came out of tax money, so it belongs to us too. Well, we know now the reservoir cost about \$87 million, which was a little over budget when it was done. It's been paid back a long time ago with power generation. It came out of the general fund. All the money from power generation goes back into the general fund, none of it's used for the operation of the reservoir right now and so, in effect, no, Raleigh residents didn't pay for that reservoir, not really. 30% maybe for, flood control, came out of taxpayer money, but the rest of it has been returned a long time ago. And so where we stand now on the issue is that Dale Crisp, the Public Utility Director and I agree to disagree.

During this timeframe I also read an article out of a state government news letter that said recent warning that Falls Lake could dry up this summer is enough to start the process to tap Kerr as a long-term water source for the triangle." That is all it said. Not one statement, above it or below it clarifying. I thought, gosh, that is awful easy to say. I live down in Raleigh, I have a home up in Kerr Lake also, and I play golf with a bunch of guys that say the same thing. They say there is a lot of water in those lakes, so why not just take it out of Gaston, or take it out of Kerr. So, right now there is a perception problem. You drive from Durham, along 85 up to VA, you go by Falls Lake and you look out and you see an expanse of dry land during this time, not a drop of water, a puddle or 2. Keep going, you're go on up go across Gaston, Kerr, expanse of water. Perception is: there is all kinds of water up there, just go up and tap it, it's not a problem. · So, I retorted as follows and it was this that got the dialogue started: I said does anyone care that this transfer would be a violation of riparian rights? Does anyone care that when the entire SE so in an extreme exceptional drought with river flows at all time lows, the Roanoke Basin is affected as well? Does anyone care that this spring we're in jeopardy of not having proper river flows to support fish spawning? And by the way, up until about a month ago that was true. Right? Thank God we've gotten some rain. Does anyone care that reduced flows and unfavorable winds can drive salt wedges far enough up the river to cause industrial shutdowns and the loss of jobs? Does anyone care that low lake levels greatly impact tourism and recreation in an area that has great economic dependence on those activities? I could probably add safety to that. Does anyone care that farming interests are also impacted by drought conditions, not just big cities? Does anyone care that areas like the Triangle grow out of control with regards to proper infrastructure support and then look to solutions outside their region regardless of the affects? Does anyone care that the areas that are generally being tapped are less economically endowed and more in need of critical resource such as water? And we all know water is going to be the critical commodity of this century, oil was last century, but it's going to be water. And from the RRBA perspective we believe the answer to that question is, yes, we do care. And that was really the content of the email I sent out to everybody that got all that back and forth dialogue started that I talked to you about with the neighbors' water barrels and that type of thing. · Next in one of the interviews with the News and Observer, Dale Crisp was asked, are you looking to Lake Gaston as a long term water solution. He said, no, we're not looking at Gaston we're looking at Kerr. And I thought, gee, my last go around on that was the Mayor said it's not on the radar screen. So, I emailed off to Dale and I asked what he was talking about? Meeker said.... and I get one back that this is a part of the 216 Study. So get looking at the 216 Study work to find out where that is, and eventually

got involved with the right people, Ben Lane, Alan Piner at the Corps on the 216 Study. Found out that Durham and Granville County may be involved and I was unable to confirm that 216 request. · What I did find out is that the 1958 Water Supply Act is the authority for all current reservoir allocations and that is on all reservoirs. The Water Supply Allocation is not included within the context of the 216 Study. The 216 is not looking at water supply and demand. 216 may do a project study on the value of water versus a supply versus hydro, but it's not in that plan yet. The idea there is, in current situations with droughts being more common and whether you believe in global warming or not and water becoming the critical commodity, is a gallon of water worth more as supply than it is for generation. If so would that require a change in the priorities of the project? But even that is not funded yet. I don't believe that work is being done although there is a desire for it and it's probably a good thing to do. Read Charlton asked is this 1958 Water Supply Act, a federal act? Yes it is and it is the authority by which, Alan can probably tell you more about it than I can, but it's the authority by which all allocations from USACE reservoirs are made. I'll show those allocations, I got couple charts that Alan gave me coming up here. The Corps also recognizes interstate problems; but, it's not a function of 216, they're not going to get involved and they see this Bi-State idea as being very desirable and needed. So they wish that NC would get with it as well.

· So I go on, I go to NC-DENR. There has been no formal request received by NC DENR or an inter-basin transfer permit from the Triangle. Big inter-basin transfers are difficult to get approved, it's a 4 to 5 year process and you're looking at \$1 million or more and I don't know whether that includes all the lawsuit costs or the fights that would be done. It could be a 20 to 40 year long-range potential for the Raleigh-Triangle but their belief is, they need something else faster and probably won't pursue the Kerr Lake route to solve their immediate problem. The thought is that maybe they're going to go look at Jordan because Lake Jordan has quite a bit of unallocated water and it fared a lot better in this drought; but, that would be an inter-basin transfer as well. As I go to these stakeholder water management meetings I hear some of the communities right field downstream from Lake Jordan saying, wait a second, hold on here, I know you guys are close together up there, you're only 15 miles apart, 20 miles apart, but what about us? We're down river. Inter-basin transfer is problematic. Okay, I did mention here the one-time proposed 216 Project to look at water allocation, that question was scoped, scoped out and will not be one. So the 216 is not going to get involved in it and that was confirmed to me.

So, Raleigh news reports and/or official statements quoted are thought to be a misunderstanding or a rumor. I say, will the real deal please stand up?· So I kept my research up and I got the real deal. In the year 2000 CH2M Hill did have a meeting with the COE and they talked about allocation. If I got any of this wrong Alan, correct me. 2002 they did get a request from Raleigh-Durham and Granville for 50 million gallon-a-day allocation. At that time, the 216 Study had started. It was thought that it would be concluded in about 5 or 6 years, it didn't turn out to be true, and so all requests for allocation were held in abeyance and they were just tabled. That right Al? And they stayed tabled and it is still tabled. · At this point however, being that all these events took place recently, the Corps is now starting to see whether they shouldn't respond to these requests and that process is going to require 2 things: First, they're going to go back to the requestor for a new Supply/Demand Study; the 2nd thing is, the Corps of Engineers,

rightfully I think, is going to do an allocation study before submission and the 2nd bullet explains that. I'm going to give my definition the yield, Alan, if I got wrong, you correct me. But they're working on adjustments to current available allocation due, due to the yield changes that have occasioned since the 3-year record drought in 2004, before processing requests. The way I try and simply understand this is, at the time I made an allocation, there is a guy he lives in 1 house, right, so there is 1 person, 1 home and he wants an allocation for water, at that time he said, okay, he needs a gallon of water, so the allocation is a gallon. Then gets married and has 2 kids, now there are 4 people in the house, but the allocation is still a gallon. Do I have it right? That is what is meant by yield? I'll talk a little bit about more of that in a few minutes, but it's . . . Hank Maser said it's a little different than that, but I'll talk about that. Is it in the ballpark? The demographics has changed so the allocations need to be . . . Alan Piner stated I think you're looking at it from a different, it's not demographically related necessarily. Alright, well I'll leave that to you then, so we won't worry about that. So that is basically the real deal. That is where it stands. Yes, there is a request for allocation. Yes, it's on the table. Don't know whether they're going to push it, I don't know where they've been since 2002, it's 2008, 6 years went by, alright? So maybe they're looking elsewhere. But I think we have to keep our eyes on it. Phil Fragapane said I have some information about, related to Dale. Our Director, John Morris, expected this might come up at this meeting and he wanted me to have some information for you related to Raleigh. So he called Dale Crisp, who's the Public Utilities Director of Raleigh, to ask him about their future plans for water supply. There are 3 levels of possibilities for their future water supply. 2 of them have to do with 2 lakes on the southern side of the city, Lake Benson, Lake Wheeler. They've already expanded the treatment plant for those 2 lakes. That should be by, online by 2010. So that is a done deal. The next tier was a reservoir, Little River Reservoir, which is a tributary to the Neuse in the Neuse River Basin, That is not as concrete as the southern lakes but they've already invested money so that is very likely to occur and according to Dale, that would supply water through the year 2040. Now, after those 2 options there are a number of options, one of which is Kerr Lake. He mentioned the number 50 mgd and that there is a request into the Corps to consider that water supply withdrawal from Kerr Lake. So that is one of a number of things they're looking at with that time frame sort of 2040 and on. Yes, now, one of the reasons I say we have to be very, very careful and watch it as it proceeds is because some of those solutions are problematic. If you've got an extreme drought and there are no inflows, what difference does it make if you have a 2nd reservoir? The inflows are not there, alright? So you've got to outside the region of drought to get the water. Someone said no, that means you got a bigger bucket. We'll get a bigger bucket. Oh, you have a bigger bucket to stir up when you have it, yes, I understand that, but suppose those buckets get empty? That is water supply planning is all about, is how big a bucket you need. Yes and I would say Raleigh's buckets not big enough now. No, the straws too big. Read Charlton said let me ask you a question. The Dan River, which flows in at South Boston, loops down into NC, now is that beyond the Corps of Engineer property line? Yes, I don't think there is any federal project. If they decide to get water out of the Dan River, which is in NC, I mean, there is no discussion there. Is there? No, that is coming out of Roanoke River Basin. By the way, that is a good lead in to my next, let me continue . . . Bob Conner said it loops around where it can affect, is it comes back they're not returning anything and South



Boston gets their water supply from the Dan River. So they would have an intake that affects the flow going into South Boston. They have riparian rights. John Lindsey replied Danville water supply also comes out of there and their concern is if too much is taken out a Milton and Eden then there won't be enough there during low flows.

These next 2 slides list the water supply agreements right now. These are Alan's charts and are the current withdrawal agreements under the 1958 Act right now. (The computer went into shutdown mode and had to be restarted) Gene indicated that the rest of the presentation will cover VA Beach contract with Norfolk and to answer the questions about what difference it makes whether it comes out of Kerr or comes out of Gaston. So next he wants to review, very quickly, the systems approach. Terry Wagner stated there is something you need to think about and I'm not an attorney, you need to seek legal advice on riparian rights. If you go back to English common law, be careful about requesting a strict interpretation of riparian rights. If a county, say Mecklenburg County owns a 3 acre tract on the Roanoke River, they put in a water intake on that 3 acre tract, a strict application of riparian rights would say that you could only use water on that 3 acres. So that may seem obvious and silly, but what you got to recognize is that common law is mitigated by what has actually happened. So we all know that VA is not a strict riparian State. If it was we wouldn't have any public water supplies in the Commonwealth. Where there is a piece of property on a body of water that serves a broad regional area, whether it's in-basin or out-of-basin. The in-basin and out-of-basin is a separate but related issue but be careful. Don't ask for something you don't want to get. Okay Terry that is a good point. I think we'll get to something I think that basically says you don't really need that, what you need to really do is manage these watersheds as a system. So, here're the allocations, you can see there is an availability of 28,885 acre feet but that may change a lot after the COE does their new allocation studies. I don't know. John Feild said that 28,885 available, that is a little more than 1/2 of what was originally designated to be allocated when we had what 50,000 acre feet? Right. The slide before this by the way is just one interesting point to be made. You see the acreage feet that City of Raleigh has in Falls lake 41,000 acres and Jordan Lake 45,000, that is almost double what the availability is over in Kerr right now, 28,000. Okay.

Watershed Management and this is idealistic, I realize that, but a watershed is a system and what do we know about systems? We know that they have input, we know that they processes and subprocesses, and we know that they have output. The main process is water flow from the rain at the head waters to the sound. And the output desires for the system of water in both quantity and quality for obvious reasons and the sub-processes that are interwoven are many and I just listed a few here: Water supply facilities, dams, lakes, power generation, recreation facilities, flood control and things like that. All of these are sub-processes but basically we're talking about one system. Even though it spans 2 states, flows through all the different communities and municipalities, it's one watershed. · We also know that processes have defects and defects in this case can be regarded as things like pollution, abusive withdrawals, and various impacts of extreme flooding or drought. Good processes have system-wide defect prevention. Flood and drought protocols, environmental studies and permits, law on the use and the doctrine of riparian rights. There Terry I'm not saying you take the strict definition, alright, but

basically I see laws about riparian rights or laws on Interbasin transfer or inter-basin transfer permits a part of system-wide defect prevention. You're trying to prevent the system from spilling water out someplace else so you don't dry up downstream, right? Got to do it right, if you're going to do it, you got to do it right. Well, you got to make sure that you don't have in-basin effects · Okay. What do I see as examples? Why is it that during extreme or exceptional droughts do towns, cities, municipalities, regions, states have different water conservation restrictions and protocols? It was obvious, even during the stakeholder meetings, Durham was on a voluntary restriction and Raleigh was on a mandatory restriction. They're in the same watershed. It's the same water. Now maybe in the upper region there weren't on any restrictions. Further down you're on voluntary, a little further down you're on mandatory, and if you're all the way down there, you turn on the spigot and no water comes out. Why is it that there is a lack of mandated restrictions and agreements between states spanning the same basin? And that is what the Bi-State commission was put in place for. So I see that as a defect in terms of how we manage this watershed. Another big defect is, and I think maybe the Commission, can get involved in this, the contract with, VA Beach's contract with Norfolk, somebody called it poor, it's problematic. The withdrawals in May through about January/February were at the peak, during that time in -flows in the Roanoke River Basin were at record lows. So they were peaking withdrawals at the time of record lows. In 2001 and 2002 we asked VA Beach to cut back and they were able to cut back significantly and we really appreciated that. When we got to around May this year we asked the Corps to contact VA Beach and see if they couldn't do the same kind of thing. Their response was that they went to Norfolk and since Norfolk basically has a contract with them and has built up credit on demand, they were unwilling to drop their demand. So, while we were at record low inflows, they were withdrawing at the maximum of 60mgd. · What happened at Norfolk? Well, for some time they were trying to do required work at the Burnt Mills Dam. Back as far as 2006 they lowered it to do the work and then it got washed out. They tried it again, they got washed another time. Finally in the spring of 2007, that is when the exceptional drought started, they lowered their reservoir 10 feet expecting to that they'd get the work done, because the wet spring would fill it up again. This made sense because the last 2 times they did it they got washed out. That never happened and the reservoir is not re-filled yet. · Second thing that happened to them was Tropical Storm Ernesto in 2006 which flooded out Blackwater River pumping station. It can only deliver about 22 mgd, so it must run a long time to make a significant contribution. By the time Norfolk was able to replace and repair the station the river levels were so low that the station could not be operated. · They weren't bound by the same license or the same permit as VA Beach. They'd built up these chits, they were not in an exceptional drought, there weren't water restrictions up in Norfolk at that time frame and they just cashed in their chits. So you get these inter-basin transfers of water that are basically problematic since you make a deal with somebody and perhaps you write all the right agreements and get everything together so no we don't mess it up, but then somehow there are outside parties that get involved and in fact are not bound by that deal. That contract doesn't come up for renewal 'til 2030 and it seems to me that somebody ought to take a look at that in the State of VA and find out whether that situation can't be corrected. They've never used that provision before, but they used it this year. So VA Beach requests to them to cut back were denied.

· Here are the record low in-flows to Kerr at that time period. We're at 13 there, that is May, then we go out to about the beginning of the year and you can see we had the 3rd lowest in-flow on record. 6 lowest, 4th lowest. Had a little rain there in 1 month. 7th lowest, so at the time of worst in-flows they updated their demand which basically was about twice the amount that VA Beach took out during the 2001-2002. Okay. I just want to end up with 1 thing, you know all about probably the interim operations being proposed by the Corps of Engineers and I wanted to just say a word about that.

One other important thing we know about processes that they require constant improvement to keep up with the change in environment. You may have heard of the definition of insanity. It's been attributed to Ben Franklin, it's been attributed to Albert Einstein, and I first heard it when I was in industry and it was during the time the American auto industry was getting clobbered by the Japanese. Lee Iacocca was trying to turn Chrysler around. He wanted things changed. I heard it at that time from Lee Iacocca. The definition of insanity is to continue to do the same thing you've always done, over and over again and expect a different result. So good processes are constantly looking at what could be changed to improve them. Change management must be practiced. A change to any part or sub-process of a system has an effect on the desired output. Practical change management dictates that you must only change one variable of a process at a time and monitor the results before imbedding.

The adaptive management approach that the Nature Conservancy's came up with and the now proposed Interim Operation Plan is aimed at improving response to extreme flooding. RRBA is supporting that deviation with the hopes that it's going to be a win-win. The idea is to de-water the system as fast as possible after a big flood and get flows back to normal as quickly as possible. We believe interested stakeholders should follow suit. RRBA also believes the Bi-State commission approach is absolutely necessary and offers the best opportunity for approximating systems concept management of the Roanoke River Basin water shed · John Feild said I would like to say thank you Gene. It's one of the most comprehensive presentations regarding the Basin that we've had the pleasure of having presented. It brings together the concerns that resulted in this meeting agenda that has been established today. We see the drought conditions, we see the emergency requirements, we see that water is probably going to be piped all over this country, inter-basin transfers included, but we need to establish some safeguards, be it riparian law, be it new federal legislation reserving a certain percentage of the allocation for the citizens within the Basin where the water is originating and being stored, be it the 216 Study which some of your slides indicated they were, the Corps was withholding decisions until the 216 was completed and accomplished and then later the, it was tabled and not going to be in the scope of the 216 Study which means it has to go back to federal legislation, I presume to address the situation. So, this is what we're getting into and I'm sure that the Corps and the state officials that'll be making presentations after lunch will further flush out some of these points that need to be addressed and maybe some compromises and our friends from NC will eventually realize the fact that we can sit down, come up with some compromises and work together on this thing and have something that is a win-win. Gene replied that is why the Bi- State commission concept is the answer. We've got to have a 2-way street. Right now it's all a 1-way street. Like you

say, when somebody says, oh, Kerr Lake's got a lot of water, don't say Kerr Lake, it's the Roanoke River Basin. If you take it out of the Smith Mountain, it doesn't get down to the sound, if you take it out of Kerr it doesn't get down, if you take it out of Gaston it doesn't get down.

Chairman Poindexter said back on your chart where there was a problem with the pump on the Blackwater and you said there that there was some State action needed, I missed that point somewhere. What I was just saying there is I wonder where there is a commission or the advisory committee could kind of push to look at this contract. See VA Beach doesn't even like the contract now. It got by them, they never realized it. I understand there is a massive credit built up. Norfolk can call for every time, every time their reservoir goes below 90% or something. There is a massive credit build-up by Norfolk and it is a provision of this contract that needs changing.

Bob Conner asked how many gallons a day withdrawal is the permit for. I don't recall, I should, I'm Brunswick County and I see a monthly flow chart that comes from VA Beach every month, but the agreement was with VA Beach. Yes and that was 60, the maximum is 60 million gallons a day, it's been as low as 7 and then a lot of times it runs about 50%. It's available on the web, you can see it everyday. There is some agreement the water that is pumped out of the lake that goes into another reservoir that is in Norfolk. That is the one we're talking about. I think that is I don't know what the lake name is, but I think that is that Burnt Mills Dam. I think we need to be, I mean it's already done, there is nothing you can do about it, what we need to be concerned about is the X-number of gallons a day that is permitted and make sure that they stay within that perimeter. What VA Beach does with Norfolk, I mean, it's already over and done with, what we have to look at and we do in the County, is that, is this chart on the level or are they exceeding what their permit might be? Well, what I'd like to see is, if there is going to be exceptional drought declared in a watershed, then all users of that water, whether they're in basin or not, should be subject to the same restrictions and that is what we don't have. Read Charlton said that is why you're saying a Bi-State commission is so important. Yes. That was our hopes for a Bi-State commission.  
Hank Maser, USACE, "Presentation to the Virginia Roanoke River Basin Advisory committee"

Hank started his presentation with a slide showing the Roanoke River Basin that is predominantly in VA, and many of the river basins in NC that served the triangle area. He made the point that the Neuse is a much smaller watershed than the Roanoke. He said Gene alluded to this earlier, water is going to become the oil of this century and it's going to become the most critical commodity by the mid-point of the century. We're going to have droughts much worse than the one we're not through yet, but we just had some relief over the last couple months so, I urge you to continue the work and I know Colonel Pulliam believes the same way. He thinks that just the fact that you've created yourselves has put you far ahead of a lot of other states particularly in basins like this where it crosses and straddles state lines. I'm going to talk about really just a portion of the basin here and that's John H. Kerr Dam and Reservoir, which we operate. The primary project purposes at Kerr are flood control and hydropower, which provide 30 and 70 % of the

benefits respectively. As you can see from the distribution of the benefits of the project there really wasn't enough population in the Roanoke, in the lower Roanoke Basin to justify the project based on flood control and in fact, hydro power provides most of the benefits and continues to do that today. · There is a lot of legislation that gives us rules and regulations on how we must operate our reservoirs. I'm not going to go into detail on any of these, but you can see there are a lot of different public laws here. What I will focus on is the water supply legislation. · The Water Supply Act of 1958 authorizes the Army to reallocate storage in existing projects for water supply across the nation that otherwise do not have an authorized water supply purpose. Kerr falls into this category where up to 15% or 50,000 acre feet, whichever is less, may be allocated from existing purposes to provide water storage. At Kerr that's 50,000 acre feet, which is somewhat less than 15% of the total storage. I'll show those numbers in a minute. Note that we're taking about storage here and I'll talk a bit more about that later. Local communities look to water supply in terms of gallons per day or million gallons per day. What the Corps has authority to provide is storage for that water. The states have the authority and issue the permits that allow the individual communities to pull that water out of that storage. So we do not provide the water supply, we provide the storage for that water. State governments, through their Division of Natural Resource, whatever it happens to be called, actually issue permits to the communities to pull that water and to put in structures that allow them to pull that water. · This slide contains some pertinent information about the reservoir, including the drainage area. What I want to focus on here is the slightly over 1 million acre feet allocated to the hydro power pool. That is the part of the storage that is available for any other purpose. When you get up over 300 feet to 320 feet, we're into the flood storage pool. That, by the nature of that level storage, is only used for flood storage. So when you get up into that range we're holding water back to prevent flooding downstream and we get rid of it as quickly as we can. When we get up to the 320 to 326 elevation, we're controlling releases to basically release anywhere from 85-100% of what's coming in at the upper end in order to protect the dam. At that point, we cannot afford to let the reservoir keep rising and hold water back, so whatever comes in, we'll let go. Getting back to the acre feet allocated to the conservation pool, or the hydro power storage pool, the 50,000 acre feet that we use under the '58 Act to allocate for water supply comes out of that 1 million acre feet hydro power pool. If you do the quick math, you can see that's slightly under 5% of the total water available. That's the limit that we've got right now. VA and NC have both decided in the current 216 Study, that there is not a short to medium term need in the basin in either state exceeding that total 50,000 acre feet. I'll talk more about this later, but for right now, that's what the Corps of Engineers is working with. That is a total water supply allocation of 50,000 acre feet based on the 1958 Act. Again, that is less than 5% of the total conservation pool storage in Kerr Reservoir. Gene Addesso asked can I state that another way. Yes. There's nothing going on now looking at cutting into the hydro power allocation for more water supply allocation. No, there is nothing beyond the 50,000 acre feet, which the '58 Act already set. If I am a Dominion Power or SEPA, I'm looking at this and I'm saying, well, Congress told me I had 1,027,000 acre feet. I really don't have that, because Congress passed an Act that lets the Corps of Engineer allocate up to 50,000 of that for water supply purposes. Bob Conner asked say for the sake of discussion, if the max of 50,000 is used absorbed next year that means that's it for Kerr Lake, unless some changes are

made. That's under current law. Congress passed that law in 1958 and Congress could pass a law next year that says we're going to take it up to 250,000 acre feet. Let me caveat that even more because there is precedent and I would say this precedent may disappear quickly given the water wars in GA and AL right now, but, there is precedent for the Assistant Secretary of the Army, based on arguments presented by whatever water requests he's given, to exceed that 50,000 acre feet by a nominal amount. But right now, I would say that, for practical purposes at Kerr Lake, we're looking at 50,000 acre feet and it would take an act of Congress for us to go beyond that. John Feild said there's no regulatory guidance that would apportion or give the Corps guidance in apportioning the water allocations available to the states. In other words, if DNER says, okay we want to take the full gamut of water to Raleigh and Durham, and they used up the total water that was allocated. Does VA DEQ have a chance to sit down and hash out how much water should be reserved for the state of VA? I'll talk a little bit about that because there's nothing specific right now in our policy, our guidance, or in the law. The Corps of Engineers is basically given the authority and to allocate up to 50,000 acres. Now, our current policy is, has been to deal with requests as they come in. When this law was passed and in the 50 years since this law was passed, there were very few requests that came in for any reservoir. Water supply never rose to the level that it has in the last few years and I would bet that, in fact I know, at the Corps right now, we're having discussions at the headquarters level about what is our policy and what should our policy be and how much we can change it. But right now, historically, the Wilmington District has always dealt with a first come, first serve policy. So, when a request comes in and comes on the table, we deal with that one first and it's based on availability of funding that we've got. So when we get the funds available we address the first request on the table. Now that doesn't mean we grant the request automatically. The requesting entity has to come in with a water needs assessment. Gene had a couple of slides that alluded to this, and I think he got the information from Alan. Basically, they have to do a water need assessment, and they have to identify the impacts of this action and that becomes the basis for us to determine how to deal with the NEPA documentation requirements of the request. So, would an EA suffice? Do we need to go to an EIS? If you need to go EIS, you're into things like a 216 Study. And, in the case of Kerr Reservoir you do a hyper-power analysis and you have to look at the value of the water to determine the relative value of using that water for hydropower versus using it for water supply. There are 3 other methods to calculate the value of the water and that goes into the pricing so that when you, you know if you do issue the water to that entity that, either that locality or that industry or whatever, the price of the water is determined based on that study. But recognize that we had the water wars in GA and AL and FL now, and the Corps is very aware that the basically vague policies we've used to implement the law over the last 50 years needs some changing. Any future action, when we get into looking at the NEPA documentation of the impacts, the advantages and disadvantages of any single action, we're going to rely heavily on the states of NC and VA. Basically, Terry and John Morris are going to figure quite a bit into how we determine the viability of that request and make a recommendation to the Chief, who makes a recommendation to the ASA. And that's the limit of the policy and that's the limit of the law as we're, required to behave right now. Read Charlton asked in the year 2008 you're looking to Congress to add to, augment or propose another public law regulating the law of '58? No, no, I'm saying

Congress could do that. We do not, we do not ask Congress to create laws. Congress does what it wants to do, but basically all of you in the room ask Congress to create laws. We are the arm of Congress and the Administration in implementing that law. So we don't create law. We create policy only to the point of implementing laws that Congress creates. So we're just implementing, basically what Congress asks us to do through the Administration and the President. We do it based on getting funding from Congress. But if a Congressional leader comes to your office and says, I want you to do this study to possibly increase from 50 to 80 then you would have to conduct a study. Well what would happen is that a congressman may come in and ask for assistance in drafting legislative language and we would provide that assistance. That Congressman would then introduce a Bill into Congress and when Congress passed it and it became authorization then we have the law that's telling us to do that study. We don't do a study based on a Congressman coming, walking into our office and saying I'd like you to study this. We don't have any authorization to do that from a single Congressman, we don't have any money. So once Congress authorizes us to do something, then they've got to appropriate money in an appropriations law to get us the money to do it. I've really simplified that process but, basically there's an authorization that allows us, it gives us the authority to do something and then the appropriation that actually allows us to actually do it. Does the Wilmington District cover VA and NC? Yes, in fact, let me go back to this map. The Roanoke River Basin is actually the northern most boundary of our area. The Corps of Engineers Civil Works Foundries and Civil Works, which means basically water resources type projects, goes by watershed boundaries and so that boundary is the boundary of the Wilmington District for Civil Works processes. Now, that's where, in the Roanoke River Basin it can get a little confusing at times because for regulatory purposes that state boundary is our line. So, if you're up here and you're looking for a permit to do something you're going to Norfolk; but, if you've got a federal project you're working with us because it's in the Roanoke Watershed and that's in the Wilmington District boundaries. Does that clarify that? Yes. Steve DeLange said I just want to say one thing. I want to clarify on the talk about federal laws or Congressional Acts or something. What we are talking about there is the approval in order to deviate from what Congress is saying. In other words, we can't have a significant impact on the project purpose flood control or hydropower without going back to Congress. Implementation of that through the policy was this 15% or 50,000 acre feet, that's the policy that the Corps has developed to implement that Congressional law. Now, when it comes to the water supply itself and the water rights, the states, you know, determine that and that's where I think this Commission comes in. I think you'd be very hard pressed to find a federal incentive to regulate water rights. That's not our business, that's a state right and I think the states would agree with that also. They don't want federal government telling them what right they have in the water. So and that's where this FL-GA and AL problem comes in because they're states trying to work it out and they're butting heads and having all kinds of problems and Congress is not going to step in, at least they have not to this point stepped in and say, okay this is your right, that is your right. It may be worked out in court and it's going that way to some degree, but I think we've got an excellent opportunity here for at least these 2 states to work this out. Hank said as somebody mentioned earlier COUGHING rely on lawyers to battle that out in court you may have already lost. It's much better for reasonable men to come together

and work out a reasonable solution. By the way, Steve is our legal counsel in the District and so he knows what he's talking about. When I start talking about laws and authorization and Congress I can get into trouble quickly. Bob Conner stated so the whole thing in a nutshell is that, that you guys only do what Congress, the 1958 Act and that's 50,000 acre feet. Any controversy in reference to who should get what is governed by the 2 states, that'd be DEQ here and NC and maybe along with some help from this Committee here. Well, right now when we're still talking about storage that's still our authority and we have the authority to enter into water storage agreements. And again, our policy up 'til now has been, 1st come, 1st serve, we look at your application and if, if, if it meets all of the guidelines of and it meets the needs and it meets the need, but documentation there are not environmental and other socioeconomic impacts to the request, we forward a recommendation through the Chief to the Assistant Secretary to the Army recommending approval of a water storage agreement with that entity. If we do not recommend it, then it stops at our level and we notify our higher authority, hey we got this request in, we've looked at it and for instance, say during the need for documentation process we determine, hey, there's a significant impact here to this request or the request does not meet the conditions of the Act and the use of the water and so we deny the request. John Feild said let me phrase it a different way so that I personally can get a grasp on what's been communicated. I think I understand it. 1st come, 1st served. If a metropolitan area makes the request and has the funding and they can purchase whatever allocation of storage that they deem necessary that is approved by the Corps and recognized by the Corps being satisfactory, they hypothetically could being 1st come, 1st serve tie up whatever allocation remains. Correct. Then it would take an Act of Congress to change the allocation process or the 1958 Water Supply Act which says, what, 50,000 acres or 15%? Steve replied the Corps policy says 50,000/15%. To change that it would take an act of Congress to remove or increase the water that's available for allocation or take it out of the power conservation pool. Potentially. So I mean if we got to that point in the dialogue, and we didn't come to some reasonable accommodation by meeting with our counterparts and so forth so that nobody's ox got gored too bad, the only recourse would be congressional legislation. Is that what I'm hearing? Hank replied yes except the Assistant Secretary does have some leeway with that guidance. He can exceed that, but right now Corps policy is 50,000 acre feet is the limit that we would go to. Given the current situation in GA, AL and FL where the, you know, previous Chiefs and Assistant Secretaries have exceeded that and looking at the situation we're in now, you know, theoretically we'll take a hard look at that going over current policy. So for practical purposes I would say, right now and I know this is where Colonel Pulliam has very strong opinions about how the Army would make decisions. Anything over 50,000 acre feet we would recommend going back to Congress to determine whether or not to reallocate water. Yes sir? Gene Adesso said let's just get right to the point because it's more critical than going beyond the 50,000. There's 28,000 available now for allocation on a 1st come, 1st serve basis. They have the request in hand. The next step is it would probably be asked what is the supply/demand and the justification for it. That's done and then they look at the allocation yield and get that all straightened out. They could in fact approve that request and that 28,000 acre would be tied up. That's right, that's right, that's the way the situation stands. Penny Schmitt replied but, there is also an inter-basin transfer involved and at that point the state becomes very... That just set up the



allocation. That just made the supply available. To get that supply, they then have to go to the State and get an inter-basin transfer permit. Another law starts. My point is a metropolitan area could tie up an allocation by getting the request for water allocation approved by the Corps without a permit. The permit comes later. Hank replied no, it would not be approved without an entire analysis of the impacts of that inter-basin transfer and any other impacts of that during the NEPA process. Without the granting of the permit. They use that in the analysis and justification. They don't have to have the permit granted do they? Steve said the 1st question that has to be asked is, do they have a valid state water right. That's when their state's rights come in. So if, City X comes to the Corps and says, I'd like an allocation from this particular lake. Our question then is do you have valid state watering right? If they say, well no, but I want it anyhow, I am going to say sorry. That's the end of it there. So you are saying that the approval of an inter-basin transfer has to come before you'll give them an allocation. Alan Piner said yes sir; they have to meet all the local and state requirements for that, for federal approval. Hank said before we would send up the reallocation report for approval. So then, let me put it this, the fact that Raleigh, Durham, and Granville County has a request in for water allocation is secondary and the primary concern is, can they get an inter-basin transfer. Hank said well, it's one way of looking at, right now that request is one request we've got, we've got some others and I'll get into those in a minute. Let's say they are first come first served. Yes, they are the one that we would address and make an assessment of whether they get any or how much they get. If I'm hearing you right, you would not grant that request until they had in their hands an Interbasin transfer permit from one of the states. Correct. Steve said we can't, I mean, that's our procedures, we can't send up a request for approval without State water looking at it. So what I said was OK. Yes, that's why I like you Gene 'cause you tend to try boil everything down to that one line, yes or no question and I think in a lot of things there is, but even with the 1st come, 1st serve one of the things that Hank said early on is, you know, even we recognize that the things that worked for the past 50 years or heck for the past 250 years in this nation don't necessarily work as well anymore. The states are struggling with those water rights issues. I mean, that's evident in NC, it's evident in VA, certainly evident in the rest of the SE. So, these are things that also the Corps needs to adapt to. This 1st come, 1st serve is what we've used so far and this is something that we're looking at now. We would be jumping the gun to say that for the next 50 years that's going to be the answer for all our water decisions. John Feild stated with a bi-state resources such as Kerr Reservoir, case in point, would both states have to weigh in as far as giving the approval for an inter-basin transfer? Or if the intake was entirely in one state and the inter-basin transfer was going to take place in one state, would the party state, the adjoining state that has an interest in the supply, would they have a chance to weigh in? Hank said yes. In the NEPA process all stakeholders and the general public have the opportunity to weigh in during that process. Now, when it comes to the specific issue of inter-basin transfer I believe if everything happens within one state, it's that, that particular issue is that states prerogative and decision under their authority. But, again, we're talking about all impacts related to a particular action and that's . . . Gene said I realize this is something that's very difficult to do. I'm just trying to get the hurdles lined up. I thought the 1st hurdle was going to be the supply allocation and the 2nd hurdle was the permit. What I'm hearing now is the 1st hurdle you got to get over is permitting; the 2nd hurdle is . . . There

again, there are a series of permits, but... If I was going to put my time and effort, you know, into this thing, where would I go 1st? Would I work first on looking at the either for or against a permit look or an allocation. You go in both directions. Alan Piner said well, yes, what you would do 1st, you have got to justify your request. I think you're telling me to put my effort on the permitting. In justifying your request, you've requested say; I don't know, 50 mgd, just for example. Then you're going to have to do that water supply demand justification study to show that you really need 50 mgd. I understand that. I have to do that to get a permit. Hanks stated parallel to doing that, you're also going, and that comes to us, okay, and we're going to access that; but, parallel to that the community is going to go to the state of NC and Phil is going to give a discussion of the current process and I guess, recent regulations governing inter-basin transfers in NC. Raleigh would have to go to DENR and request a permit and they're going to have to go through a process to that inter-basin transfer allowed. Then they're going to have to get a permit for putting in the intakes. I don't know what all, but there are several permits that they have to go through to make sure that their request to us is viable and set up and so they're going to do all these things parallel. I'm fine with that. My take is the water is coming out of the Roanoke Basin so it doesn't make any difference whether the intake pipe is. But, State Law is going to say the intake pipe is in NC, you only have to go to NC not VA. Okay, I'll get back to that in a minute, you have a question here. Bob Conner said let's say a locality or city comes in and I believe you've got 28,000 . . . It's actually going to be less than that, I'll talk about that . . . . . but it's 1st come, 1st serve, right? Well that's been policy, that's been . . . Yes I know that's policy. What I'm saying is if a city comes in and requests the max, you have got to look at that right? Yes. That's City A. If City B comes in and says I need 15,000. Where does that put City B because A is already asked for the max and as you know and we experienced with VA Beach, this thing can go on for 10 or 12 years through the process and here I am, I really need that 15,000 and 'm tied up. And in fact that's where we're already having discussions with our headquarters, within headquarters from several different parts of the Corps about, hey, you know, our past policy, we didn't get, we didn't get that many requests so they didn't come on top of each other and we never had to deal with this before and we were never dealing with the ceiling of our allocation authority. Now we're hitting it, basically we're going to, the Corps is going to have to deal with these concurrent requests and come up with a policy. Under the present law and I'm going to stop here, 28s over here already 1st come 1st serve. They are 10 to 12 years into this thing. I'm over here with 15, unless the law is changed, I've got to wait to see what the outcome is going to be over here for the 28 unless Congress says, hey, enough is enough, we're going to increase Kerr Lake to, 80,000, is that right? Terry Wagner stated I think the basic misunderstanding that you have is the example that you're using. You're assuming that the 28,000 acre feet allocation is not necessarily needed immediately. If the 28,000 acre feet are needed immediately by City A, guess what? They don't have 10 to 20 years to wait. So, the allocation, excuse me the water demand projection is going to drive that decision. So, as you say in the past 1st come, 1st serve, the assumption has always been, nobody's come and ask for a permit for an allocation out of Kerr that they don't need. The immediacy of the need is going to drive future decisions. I'm going back to the 28 and you know . . . . . Don't worry about the 28000, it don't matter whether you're here or someplace else where that's not a limit. The immediacy of the need is going to drive that permitting

process. Mike McEvoy said the problem with that Terry though, is it tends to favor the large municipalities over the rural. I'm not saying that it doesn't but the fact of the matter is if there is a immediacy of need in VA, I won't speak for NC, and an applicant comes in and wants to apply from a body of water surface water withdrawal permit and they have a documented need that's going to occur in 5 years, you can beat your bottom dollar that that's going to be looked at differently than the potential for need 50 years out. Bob Conner said some of our local towns adjoining the lake area could have emergency need and I think in terms of Roanoke River Water Authority. We may have a need down the road to increase our intake, so that would be, if we can justify it, that would be an emergency over and above someone else that may be in. Gene Adesso said Terry, when CH2M Hill recommended to Raleigh based on the demand requirements in the year 2020. That's what their study looked at, it was 2020. So we're sitting there, it hasn't been worked on. I hear what you're saying, if someone come in and even if that was, even if that request was okay, if someone come in and had a closer in demand, they had an emergency situation, spigots stay open, no water's coming out, they would be given that allocation because you guys didn't need it until 2020. No, no, what I'm saying is, if you look at, but you have to look at, I'm not talking about emergency. What we've heard the Corps say is that they historically look at 1st come 1st serve. Wrapped up in 1st come 1st serve is an evaluation of the need. I understand all that. Suppose somebody comes, say they don't need it until 2020, what do you do then? Do you give them the allocation or do you say, wait until 2020 and then come and see us? Because somebody might come in with a closer in time frame. Hank said it's a multi-year process. Let me, we can literally talk about this one issue the rest of the afternoon. I'm going to say a couple more things and ask you to let me move on and we can come back to this after I finish the presentation. Sir, I'm sorry, I forgot your name. You brought up an excellent point. I think the point you're bringing up is, if we have a valid 1st come 1st serve applicant that comes in and we're seriously looking and they have a request for the rest of the 28,000 say, we're going to be looking at that and yes, that would tie up, we would not be looking at going over that 50,000 with the 2nd request that came if it was 15 or whatever, until we made a determination of that. So, yes, that's a weakness in the policy right now that we have to wrestle with in the Corps of Engineers to determine, okay, if we're going to start getting multiple requests coming in and in fact, some people are going to say, hey, I'm not waiting until it's an emergency, I'm going to throw in my request now. We have to decide how to deal with that. We haven't had to deal with that in the past and it's going to be, it's basically going to create policy in the future. That policy is not created at our level, we get hit with these things and we go up the line and we ask Headquarters, hey, help us out with policy. We've already done that in a couple cases. We're asking questions of our Headquarters Office and again, within the Corps, we're going to have to determine how to deal with these new issues that are, that are coming up. We don't have any good answers right now. Read Charlton asked about the principle of inter-basin transfer and whether it existed in all the rivers that are on the east coast like the Pee Dee, like the Santee, and like the Savannah River. Phil will talk about the current inter-basin transfer laws in NC. That's not a federal issue. We do not have an authority related to inter-basin transfers. Phil Fragapane said SC has an inter-basin transfer statute that NC's was modeled after to some degree, I'm not sure about GA.

· I'm going to move on here and hopefully clarify some things and probably give you a lot more questions to ask. This slide is just meant to give you a perspective of the multiple interests in perspectives in using the benefit of Kerr Reservoir up stream and downstream. They may not be all inclusive. Again you can interpret these things in different ways. It's just up here to give you an idea that we're dealing with a lot of different interests and needs and our job is to fairly accommodate the greater good. That's our mission in looking at any future allocation of resources at Kerr. That's what we're getting into in the 216 right now. As I already said, both of our partners VA and NC, have asked us to down scope the water supply portion of that because they've got ongoing studies of their own right now and they want to complete those before looking at water supply. Bill Reidenbach said on the upstream side, I believe you also specified some flood control, you tell AEP . . . You're right. I said these are just representative, they're not all inclusive and I apologize for anything I left off here. It's just to give you a representation there are a lot of different and competing interests upstream and downstream of the dam.· Okay, getting back to water supply. Here's a look at what we currently have, City of VA Beach currently has an agreement for a little over 10,000; City of Henderson, we just re-negotiated an agreement with Henderson and in fact that has accommodated the 2002 drought figures, which I'll talk about in a minute. That gets back into, Gene, what you were talking about re-looking at some of the existing agreements we've got. You can see we have some very small needs there, VA Department of Corrections, Mecklenburg Co-Generation. Based on these numbers, the remaining allocation is just under 29,000 acre feet. However, we will go back and look at the existing allocations for those 3 customers. Because we have a new drought record, I was talking with Alan about this at lunch time, I hope I get this right, I'm going to try to use that rain barrel philosophy, the rain barrel of Kerr Reservoir was assumed, back when we entered into these agreements to really never go below a certain level, let's say, you know, the bottom steel strap of the rain barrel, okay? And that was based on the history of the watershed. That is the drought of record at that time. Well, in 2002 we had a new drought record and we figured out that, holy smokes, the reservoir is not going to get down to that strap, it's going to go 2" below that strap in the rain barrel. Well, if we don't reserve more water during that drought, more storage for these users, they're going to run out during that drought of record and so we re-calculate how much storage you need in the reservoir to get this kind supplies you need during the drought of record. And so you actually need more storage than you did before because you have a new low level in that barrel. Does that make sense? Yes. I was using demographic population and you're using drought of record and I understand it now. Right and so what we'll do is, we'll re - calculate that for these 3 users and give them the opportunity to purchase that additional storage. Bob Conner said the City of VA Beach you have that in John Kerr but the intake is on Lake Gaston. My question, the 28000, 29,000 that's there now, is that part of Lake Gaston or is Lake Gaston separate and has separate water, because you, if it has a separate, then, my opinion, the 10,000 should come out of Kerr's storage. No, what happens is, Lake Gaston is a basically a run of river Reservoir. If it has any storage capacity, it's a very nominal amount. So whatever we release out of Kerr goes through Gaston. There's no storage allocation available at Gaston. So, let me make sure I understand, but I need to get things clear in my mind. Basically what you're saying is Lake Gaston does not have any appreciable water storage. Correct. It's run of the river

basically. So, if anyone has any plans of tapping into Lake Gaston, follow me, there is no water storage there. Correct. No request can be made. Well, no, the request can be made because the City of VA Beach did it, because they recognized that to make that release out of Gaston we would need to release water out of Kerr. Alright, I'll put it simple then. Lake Gaston, Kerr and Lake Gaston pool it together, they got 28, 29,000 gallons of . . . Yes. Gene said what you have to think about is VA Beach gets their water from Lake Gaston via Kerr Lake. It just goes through Gaston. That's why I kept emphasizing it don't make any difference where you take the water out of, it comes out of the basin somehow. Bob Conner said I always thought it was Lake Gaston Watershed and you cleared that up for me . Read Charlton mentioned that you have another dam down at Roanoke Rapids. Yes. That same principle would apply there. Is Roanoke Rapids pump storage with Gaston, Alan? No. Okay, so they're just both run of the river. Yes. With very nominal, if any, storage. At Roanoke Rapids and Lake Gaston, there is some flood storage. And, again, we don't use any flood storage capacity. Essentially they have purchased an insurance policy against that drought of record by purchasing the storage allocation at Kerr. Their going to be pulling from Roanoke River most of the time but when you get in a drought and we release water for them as they request to meet their water supply needs. Bob Conner stated the Roanoke River Water Authority, we get our water from the Lake Gaston. Right. . . . And that's not included. Yes, right, because you don't have an agreement with the Corps so . . . Alan replied you are talking about South Hill? They came to us back in the early 90's and asked about allocation, we explained it to them and they went away. We never heard back. So essentially you have no guarantee of meeting your long term needs in a drought. Someone said Alan, if they got a straw in the water Kerr is run to keep Gaston within the limits. If they're pulling out, you're going to be adding the water whether they're paying for it or not. Hank continued alright, just a couple more things on this slide I want to point out. We do have a couple of grandfathered entities here; one, the City of Clarksville, another one the Burlington Industries. They were pulling out of the river when we built Kerr and they were grandfathered in at a reasonable usage rate. And that's just for your historical information. Read Charlton said Burlington Industries no longer exists does it? Bob Jean replied but they still got the water rights. It's attached to the Deed. Bob Conner asked VA Department of Corrections, where they pumping water to? They get their water from Clarksville so they have an allocation that they never really use. We pump water to the Department of Corrections through South Hill. The one near Clarksville? I don't know where I think you need to really re-evaluate some of these things up there. Hank said well, I mean, this is an existing agreement, they don't exercise it, they don't exercise it, but it's a . . . I guess my point and I'm going to stop. If VA Department of Corrections and I know that Roanoke River provides the water to South Hill. South Hill's customer is Department of Corrections at Boydton and also the Field Department of Corrections at Baskerville. I don't know of any departments that are located around Clarksville, John, do you? So if back in '89 before the inception of the Authority, the Department of Corrections may been correct in asking for this, but that's 23 acres that someone else may be able to use if they're not using it. I know for a fact where they're getting their water from there. John said it is coming out of Kerr. It's coming out of Kerr Lake, but that is part of our . . . I'm sorry. Don't be sorry, you're bringing up excellent points and you're right, maybe in '89 they did have a need for the water, they found another source now,

you know . . . Alan said you're absolutely right, I mean, there be considerable latitude here and Terry may be one to go that you would go back to the Department of Corrections or VA Beach or whoever and say, hey, you got any portion of your allocation that you have since covered through some other means or maybe not have a need for in the immediate future and you could, through Terry, you know, maybe work something out there. . Okay, here's the status of what we see in John H. Kerr Reservoir in the immediate and near future. We've got 3 current agreements that are entitled to have re-allocation totals, storage totals, calculated because of the drought of record in 2002 and that's VA Beach, Department of Corrections, and Mecklenburg Co-Gen. Alan, tell us how this works. Do they request it and then we look at or do we look at it and then offer them the storage? Alan said I was directed to go ahead, because of the new drought of record, re-compute their yields and approach them. So we're going to look at the yields required to give them their original requirement and then offer them a modification to their agreement to buy the additional storage required to take care of what they already have an agreement to get, but they can't get anymore because of the drought of record. In other words, they've already purchased a portion of that rain barrel and now they find out they going to need a larger portion of that rain barrel to get the same amount of water out that they thought they were going to get all along. John Feild said well it might be prudent to take the Roanoke River Authority and add them as a 4th entity up there since they don't have an allocation and they take the water out of Gaston. These are would only be current agreements that we've got signed and approved. . . But they are taking water and they haven't paid for an allocation of storage. They have them a treatment plant and they're piping water to South Hill all the way back to the Department of Corrections. That might be out of the 23 acre feet that the Department of Corrections has, but for the rest of the system that's served by the Roanoke River Water Authority, you're don't have an allocation in Kerr. Essentially you are pirating water from Old Dominion's power customers. Bob Conner said we pay them \$2000/year. Okay, you are paying them, so they're trading electricity for water. Hank said they've been giving you a tap. You're paying \$2,000 for a tap into the River. Gene Adesso stated I would suggest then that the result of this is going to be VA Beach will increase, Corrections you might get that 23 back if there is another source then you might have to give it back if you include it again. We've already taken care of Henderson. Mecklenburg Co - Generation might get a little more, so the net result of the re-allocation looks to be based on yields reduced to 28,000 Yes. Right. Read Charlton asked can they sell, if an entity doesn't use its allocation, can they sell what they don't use? Yes, once they have the right to the storage the way they use the water is based on state permitting. Correct me if I'm wrong but the states issue the water use permits. If I'm say Burlington Industries and I'm tapping into the river, I've got a permit from the state for how much I can pull out of that river. The state determines whether or not to give that to me or not. All we're giving them is storage, we're giving them access to that water and the state gives them the permit. Phil stated related to that Hank, sorry, if that, if the water was an inter-basin transfer then there's clauses in the IBT law that would restrict how you can re-sell and I'll get into that. Gene asked do you know whether that applies to the Kerr Lake Regional System selling to Oxford. It basically says that anyone that they're going to sell it to has to part of the certificate. I get all kinds of calls, I got a call at the Local Trading Company which is a great big landscaping outfit and nursery down in Raleigh, very good by the way, they were buying water from the

Town of Henderson and trucked down to Raleigh. Hank said again, you're talking about a lot of issues that are really under the purview of this Committee, but the Corps of Engineers really doesn't have a role in it. They were doing it, 600 gallon trucks. Let me just go to the really hot topic on this slide, we do have a 2002 letter signed jointly by these 4 municipalities, Raleigh, Durham, Cary, and Granville County requesting up to 50 million gallons a day and that is on the table. We have recent confirmation from Raleigh that it is still a valid request. My knowledge, we have not contacted Durham, Kerry, and Granville County who were co-signatures on the request. This has, again, I forget which presentation, I think, Gene alluded to it earlier, at one point, you know, the Mayor of the City of Raleigh didn't even, maybe didn't recognize that it was still a valid request, we certainly didn't for a few years, we thought it was off the table. We just recently have confirmed that it is still a valid request and so we are forced to deal with it. We're, basically, we've had a lot of discussions on how to deal with that now given all of the issues that we've already discussed. · Okay, I'm going to move on to the John H. Kerr 216 Feasibility Study. I pretty much have already talked about this. Gene mentioned this in his discussion and everything he said is pretty much accurate. We have 2 partners in this Study: NC and VA. They've both agreed to remove just about all water supply issues out of the current 216 Study and they've done that for various reasons, one of which was they're both currently conducting studies on their own of their water distribution and supply needs within each state. They wanted to complete those studies before they address it any greater scope. Right now we have pooled just about all water supply issues out of the 216. The only thing we'll get into is possibly the value of the water related to hydropower. And, if you're interested in more information on our 216 Study there's a website here where you can get additional information. This slide presentation will be made available to everybody. Greg said he would post it on our website. This was going to be when I asked for any questions. We may have covered that already, but really, if you have any remaining questions, I'll be glad to discuss them at least now. Okay, thank you very much.

Chairman Poindexter Thank you, Hank. He asked Terry Wagner if the State of VA now aware of the request from Raleigh. Terry replied absolutely. We're aware of it but at the stage that it is now, there's really nothing to be done. We certainly are a stakeholder and we would be involved in a NEPA process when it comes up. Phil Fragapane, NC DENR Water Resources; "NC Law Regarding the Inter Basin Transfer of Water"

I like the approach that we used with Hanks presentation so just mix all the questions in as we go. I am Phil Fragapane and I am an Environmental Engineer in the Division of Water Resources with the NC Department of Environment and Natural Resources. Probably at least 1/2 of my work, is related to inter-basin transfer, coordinating the process when water systems come and request an inter-basin transfer. So, that's one of the reasons I'm here today. Our Director, John Morris, would have come, but he had a prior commitment. So he asked me to come and provide some information about our inter-basin transfer laws in NC. So, I will do my best to answer any questions that you have about the law and any other thing within my experience and knowledge that I can provide. However, I will not be able to speak as a representative of the State of NC or even my Department or Division so let's just go ahead and do it, do our best.

· First these are just some introductory thoughts that I didn't prepare a slide on, but in our country we don't have rules or laws that tell us where we can go live or where we can take our families. We're all free to go wherever where we want. So, one consequence of that is that the population centers sometimes don't respect river basin lines. So we get into situations where, you know, the local water sources are not sufficient to support our population. So, we can either control that population growth or manage the growth or we have to manage the resource. In general, our elected leaders don't get elected on the platform of managing growth in their regions and so what we're left with is managing the resource. In NC we have a number of ways that we use to address that water resource management issue. One of the things is, since about 1992, the State has been doing local water supply planning. Every local government, every 5 years, has to submit to the State, a local water supply plan. That plan includes a lot of things. One of the biggest things it includes is future projections of water needs, identifying water sources, whatever they might be, alternatives, all these types of things, so water supply planning is a big piece of resource managing. Another thing is a river basin management approach, which we are in the process of developing. The 1st presenter, Bill, talked about the Roanoke River Basin model. Well, that's a very powerful model and we also have similar models in the Cape Fear River Basin, in the Catawba River Basin, and the Yadkin River Basin. There are 18 major river basins in NC, so that's partial. We're not quite there yet. We're in the process of modeling these river basins and that's very important because these watersheds act as a system and if you have an input upstream it has impacts downstream and vice versa. The best way to understand those impacts or at least the best way we know at this point scientifically is through hydrologic modeling. So we're in the process of that. And then another way is through our laws and NC has a number of laws, one of which is the Surface Water Transfer Act, which is what I want to talk about today. It does not make illegal inter-basin transfers, but rather it sets the conditions under which you can apply and receive an inter-basin transfer. I think that gets me into my slides. Our current law in its current form started became effective in January 1994, but it has been changed a couple of times. It was modified in '97, '98, and again last year. So it's time that we talk about the IBT Law. One thing that happened in recent history was in January of 2007, some of you may know, the Cities of Concord and Kannapolis were granted, an IBT for those Cities from both the Catawba River Basin and the Yadkin River Basin. It would be an understatement to say that was a controversial decision. Now the States of NC and SC have just begun what could be years, if not decades long, discussions or legal conflict over that decision. I think one of the by-products of that decision was that that the General Assembly and the lawmakers both from that region and all around the State looked more closely again at NC's inter-basin transfer laws and they changed them. The result was they added a number of hurdles and significant hurdles to getting an inter-basin transfer. We'll talk about that a little bit in future slides. I have here certification is required for any new transfer more than 2 million gallons per day. What that means is, if you don't transfer up to 2 million gallons per day, then the law does not apply. So, you know that's on a maximum day basis, not an average. On any day, if you transfer more than 2 million gallons, which means removing water from one river basin without returning it, then you would need to have an inter-basin transfer certificate. Now there are a couple of exemptions. There is one major exception to that and that is grandfathering. The time that the law went into effect January '94, but it was, the grandfathering date was



set as July 1, 1993. We'd said that anybody who has their pipes in the ground is not going to be negatively affected by that law. It's not just your pipes in the ground, you also had to have your water treatment plant and you had to have your plan as to how you were going to treat the wastewater. The wastewater treatment plant, the septic system, all the infrastructure that it takes to withdraw, use and deal with wastewater. Up to that amount, which is a very important part of the inter-basin transfer process, identifying and estimating that amount, the law does not apply. So, in a number of cases you'll hear that this system had a grandfather capacity of X MGD. That means that they can transfer more than 2 MGD up to that number and still not need a certificate under the law.

Another important point is that the decision maker for inter-basin transfers is the Environmental Management Commission which is an appointed body. There are no elected officials on the Commission, but rather they are appointed by the Governor. I don't know the details of how they're appointed, but there are 18 members of that Commission all with different expertise. Some are in water, some are in air and different ones, but they deal with a broad range of environmental issues, one of which is inter-basin transfers. Other proponents of the process are public notice. It's a very public process, much more public with the modifications in the law last summer. I'll talk about that a little bit more. And then, it's partly a political process and partly a scientific environmental impact analysis process. So that's why there's great public involvement and there's also a great requirement to document your impact. This slide highlights the changes last August to the law. The law set up the Environmental Review Commission, which is a Commission of General Assembly members whose purpose is to study surface water resource allocation in the State. It's a very broad directive that they were given, one part of which is inter-basin transfer. So, over the next 2 years that study will be conducted and the results are due in the summer of '09 if it doesn't get delayed. It may well take longer than that, but at the end of that process they will come back with recommendations on the future management of water resources and whether the laws are adequate or highlight or in need of change. So it could be that in '09 or soon thereafter inter-basin transfer laws and/or other laws may be modified. So that 2nd point re-states that, to review the state laws regulating surface water resources. A big part of the inter-basin transfer law is how you define the river basins. There are currently 38 defined watersheds for the purposes of inter-basin transfer and we'll see that map here in a second. Another change to the law is stricter rules for public notification both in and outside the State of NC. In general, there is greater public involvement in the process. · Here is a map used to define inter-basin transfer (IBT). These red lines define a river basin and the law says if you pull out of any area within one basin and don't return that water to that basin, then that's an IBT. Now you can see that there are some rather small basins. This is the famous Uwharrie River Basin (18-3 on the map). It's one of the smallest. This 9-4 down here is the Shallotte. So the law defines inter-basin transfers according to this map. Now the law changed last year and it said that we at the Division of Water Resources are given the directive to define the basin outside the State of NC for public and notification processes. · I have a draft of the new map which has not been finalized at this point and you can see this map within the borders of NC is the same, but the basin lines are extended outside the State boundaries. In the case of the Roanoke, you can see that the entire Roanoke River Basin is currently recommended to be included as the basin. Now what that, that doesn't mean that the law, if you would draw on the VA side that the law applies, of

course it cannot, but what it does is it sets public notification requirements. Basically says that you have to notify every county and water system that may be affected up and downstream of the withdrawals both on the source and receiving basin side, so that what the significance of that basin line is, that sets the boundaries of whom has to be in the process, as part of the process. · This is the old process prior to the 2007 changes. The purpose of this is to show you that it was a roughly 5-step process and at the end of the process you have EMC decision on whether or not to transfer the certificate. There's a public part of it, there's an environmental review part of it and then you get to the process. · Well, after the new law we went back to try and do a similar type of schematic for the process and it looks now something like this. Simplified. Without going through all the details, you can see that there are quite a number of steps that are involved. I just want to point out the top box in the middle says submit a notice of intent. That wasn't a part of the previous process. That now begins the inter-basin transfer process, a notice of intent, which must go out to the entire notification area including both source and receiving basins in NC and adjacent states according to that map that we saw before. Gene Adesso asked do you have a statement like that in hand for Oxford and Creedmoor? Well, this is for the law, so it would be the case where a certificate would be required. In the case of Creedmoor, they receive water, if the proposal is say purchased from Oxford, which then gets water from the Kerr Lake Regional Water Service, as I understand it. The Kerr Lake Regional and that's the last thing I'm talking about in my presentation, the Kerr Lake Regional Water System, they sort of began just, just sort of dipped their toe in the water back in 2004, toward an inter-basin transfer. They did a scoping document. Since then it's sort of on hold. It's been on the table since 2004 and I don't have a whole lot of information since. Under the proposal that was made at that time, Creedmoor was listed as an ultimate receiver of that transfer of water, which, under the current law, would require that they would be party to any certificate. Gene said so they need a certificate. They would as I understand it. They plan on doing it, it's ongoing, I'm just trying to find out did they actually submit a request? If that's the only transfer taking place from that source to the receiving and it's less than 2, then the law doesn't apply. But if, sort of a broader question. · When the EMC makes its decision it has to base it on a number of things. It has to find that the benefits outweigh the detriments and that the detriments are or will be mitigated. The transfer amount that they approve must not exceed the amount projected as a shortfall to the person or the body that's making the request, and they have to conclude that there are no reasonable alternatives to that inter-basin transfer. A big part of the environmental impact analysis is identifying alternatives and making sure that the inter-basin transfer is the only reasonable alternative. · But also the new law now sets up a number of conditions and every certificate will have to include these conditions. One of those is a water conservation plan and that plan has to be equal or more stringent than any other conservation plan in the source basin. Also has to include a drought management plan, again equal or more stringent than any other drought management plan in the source basin. You have to do quarterly reporting within 30 days of the end of the quarter. And there are a number of other conditions. That was just a highlight, so, you know, there are a lot of conditions.

· The effective date of the new law was August of 2007 and there are 2 exceptions to that law, neither of them applies in the Roanoke River Basin. It said that if had already started your EPA documentation at the time of the law then the old, then you can do, go through

the rest of the process under the old law and it also says that in the CCPCUA stands for Central Coastal Plane Capacity Use Area, those counties that's in the SE corner of NC are exempt also until 2011.

Now, the last thing I want to talk about is the Kerr Lake Regional Water System. Like I said, in '04 they submitted a draft environmental assessment scope. That does not qualify as a SEPA environmental document. So if they were to continue with the process, it would be under the new law. It was determined that they had infrastructure to support a 10 million gallon per day transfer at the time in 1993, which was the original grandfather capacity clause. So, up to 10 million gallons per day from the Roanoke to the Tar and Neuse River Basins, they are not required to have inter-basin transfer certificates. However, if they go above that 10 mgd, they would need one. According to the documentation that was submitted in 2004, their inter-basin transfer was expected to surpass 10 mgd in 2008, which is now. But we don't know anything since then. They are well aware of the inter-basin transfer law and it may be that that projection for 2008 has changed since then. And so, there's really no other information in regard to Kerr Lake Regional Water System since then that I have to report and I think that's all. It seems based on this that they have the right, unless they transfer it to the Tar, that's Oxford, right? Yes. They don't, then the law doesn't, doesn't cover anything after that and the transfer from Tar to Creedmoor, let's see, that's the Neuse. That's the Neuse. If they do this Creedmoor thing, and you guys are not getting involved. Up to 10 mgd. Yes, that's right, I probably misspoke before and I said 2 mgd. It's exactly 10. John Feild said so when that was grandfathered and they came up for their re-issuance of their permit or license or whatever it was called that took place in 2004. Yes. Inter-basin transfer in the magnitude of 10 million gallons per day wasn't on the table as been responded to me by Terry when DEQ didn't make a comment. In our Richmond meeting I asked you if inter-basin transfer was on the table when you had a chance to comment on the re-issuance and the grandfathering of the permit to the Kerr Lake Regional Water System. Terry Wagner said grandfathering no, but we don't have an issue with that. You didn't have an issue? Pardon me? You didn't have an issue? That is right. Phil said that did not go out for review. John continued I don't think anybody recognized, maybe Terry did, that 10 million gallons per day was going to be permissible for inter-basin transfer at that junction. Across 2 basins because you responded that you would have commented, your agency would have commented had it been an inter-basin transfer. I can see where NC's regulations say 2 million gallons per day is not an inter-basin transfer and you can accept it. But it seems like a 10 million gallons per day inter-basin transfer was snuck through the back door in some kind of way here. Phil responded the law says 2 million gallons applies to everyone and then if you already had your stuff on the ground at, in 1993, then you can get more up to your full capacity to transfer at that time. Then the Department of NC looked, in those cases they look more closely and they require 3 and this is part of my work, we require documentation to document every piece of your capacity. You have to show, you know, how many connections you had and what was the capacity of your treatment plants and all these things and then we make that judgment of what's that grandfather capacity, that's not a public review process. And so then, so that's why Terry would not have had the chance to comment on that. Bob Conner said let me, the 10 million gallons up there, the Tar and Neuse River Basins, are they over near Henderson?

Yes, 15-1 on the map. Where is the intake, VA or NC? NC. And so where, how far are you transferring that water? Is it going to Henderson? Yes and Oxford, and Warren County. That's not part of Henderson withdrawal? Yes it is. Okay, that's what I wanted, okay. Allen stated just a frame of reference, Creedmoor is about 30 miles north of Raleigh. Phil said I wrote a note up here to remind myself there are 3 bulk customers in the Kerr Lake Regional Water System and those are Henderson, Oxford, and Warren County. And then secondary purchasers from those 3 include: Norlina, Kitrell, Warrenton, Middleburg, Franklin County, and Louisburg. Gene said Franklin County and Louisburg are the only ones not in the Roanoke Basin. Bob Conner said this could have an impact and maybe a question comes to mind, I noticed with Warren County and North Hampton County, NC they have a lot of water tanks set up and they are putting pipes underground everywhere and as a matter of fact they've got them all, all the way almost to the Brunswick County line and they are utilizing the groundwater. The groundwater could have an impact on the supply if we continue with the drought. Is there a potential of Warren County being able to tap into the Henderson 10 million gallons or could that be another source of withdrawing water from the lake? If you got tanks up in the air and you can't get the water out of the ground, what are you going to do? That's not a loaded question. Yes, I mean they have to look at their options, but one option is not to transfer more than 10 mgd out of the Roanoke water without doing quite a bit beforehand. Gene stated one of your previous charts raised a good issue for the VA Beach Transfer. We did not get a drought management plan for that. Terry Wagner replied I am not positive about that but I don't think there was. That needs to be revisited. Basically this would come into play during this drought of 2007-2008. When this area is not in drought and you're in drought and you're really hurting, you're just sucking it out at capacity . . . Yes, the only thing I can say in regard to that in 2002, VA Beach did implement drought conservation. At their own desire, only because we asked. But they issued them before any other areas in that region issued a call for drought conservation and yes, it was, it was at the host locality suggestion. A stakeholder's water management meeting is how it happened. Allen indicated but before that, I think you're right, it's not formally part of any agreement, but Tom Leahy has said on numerous occasions that their willing to share the pain and that when other parts of the basin went in restrictions they would too. I think what's happened is most recently this contract arrangement with Norfolk has sort of pre-empted that.... It should be a written agreement and not a gentlemen's agreement. Chairman Poindexter said okay, I suppose I could conclude that NC has more regulations on the book than VA does and . . . That's the other comment I'd like to make, I would like to see what they've done in this inter-basin transfer legislation absolutely adopted by VA so that they're doing the same thing. I don't know if it is going to cover all this but it makes no sense to me at all for them to go through all of this and have the VA side, which you, put up the map, there's an awful lot of the Roanoke River Basin in VA. But there's a completely different set of regulations and criteria for permits and that kind of stuff, it makes no sense at all. John Feild replied that's why we're going to get them to come to the table and work this out. Chairman Poindexter asked if there were any NC regulations that are river basin-specific? No, not by basin but I have got to mention there's a couple exceptions to the IBT law. That capacity use area, there are a couple of exceptions but, other than those exceptions you got, it's about the same. Is there one section in your codes, the NC codes that covers it all or is it interspersed? Yes, no it's, if

you'd like I can provide that to you, I brought hard copy. Read Charlton asked what is your definition of surface water? Everything above a certain elevation? It's a good question but the law only applies to surface water. The County of Chatham in GA, this is back in the '30s, put in a paper mill up the Savannah River from Savannah and they use artisan water and they're absolutely no laws in the State of GA, or I don't know, anyway, there were no laws to prevent or regulate what water they could pull through that artisan. The IBT law says that the law does not apply to groundwater and then it defines groundwater rather than defining surface water and it says the groundwater is either removed from the ground or derived from water removed from the ground. I think artisan water would classify as groundwater under that definition. So it wouldn't apply. Bob Conner asked on the inter-basin transfer, you said it has, some has to return, do you put a percentage on that return to the basin? To estimate the transfer you measure the amount withdrawn from the source river basin and then you estimate the amount that's returned. In some cases you can measure it if you have a place for water treatment plant discharge, then that's measurement. But in other cases you have to estimate the amount consumed in the source basin and then that would qualify as a water return to the source. So you'd want to know 2 things: how much you took out of the source basin and how much you put back in the source basin. The difference between those is the transfer amount and in some cases you have to estimate that. Gene asked do you know if any distant transfers that are that are actually returning more than that. Not just consuming it, and then putting it back in their own basin. Do you know any that's returned to the source? Yes, a lot of them, I'd say most of them. Most of them withdraw from the source, use some in source, maybe return some from the source, but they also use some in the receiving, and so you just have to figure out what. I don't know of any that returned. Cary is an example, like, they take water out of the Cape Fear and they use it both in the Cape Fear and the Neuse and then with, they discharge it to the Neuse and so, you just have to look at the numbers and figure out what the net transfer is. Inter-basin transfer seems like a simple thing, you take it out here and put it over here, but when you get down to the details, there's water going everywhere and you've got to make some judgments and estimations as to what's going on. Bob Conner asked is that predetermined? In the agreement, inter-basin transfer, is that a pre-agreement on a certain, do you do, you've got to know what's going to know how much you got coming back and that would be kind of confusing to directly answer... I can say 2 things: one is, we looked closely at the grandfather capacity and we looked real close at all the assumptions on coming up with that number; the 2nd thing is, once a certificate is in place, part of that is a monitoring requirement and that monitoring requirement says this is how you define your transfer and these are the numbers. So it's well-defined at that point. Prior to . . . After you get a certificate it's well-defined before it's an estimate. Gene indicated that when he said I know of none, I meant for Roanoke . .

Yes. I know of non inter-basin transfers in the Roanoke that come back to the source. Those with riparian rights that return back to the basin are not problematic. Terry Wagner asked do you care whether it's used outside of the basin or whether it is consumptively used in the basin? What we care about is the effect down below, if the effect down below is okay, maybe it's alright and like I say, if there's a 2-way street . . . No, no, no, the question is, is an inter-basin transfer, by its very nature, more onerous than a consumptive use

within the basin. Bob Jean replied it depends. My problem in listening to all of this, my concern, and I hadn't heard anything to really alleviate it, 50 years down the road I could see my grandchildren sitting on the side of the lake and somebody wanting to build a plant down the road in sight of the lake and they say, no you can't use any water, it's all gone

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NC. Does it make any difference to you though whether it goes to NC inside the Roanoke River Basin or outside the Roanoke River Basin? It would depend on just whether it was some reserved for inside the basin. The point I'm getting to is, I don't think you're really worried about inter-basin transfers, that's not the issue...the issue is the potential shortage of water. Just like the gentleman that spoke 1st today, doesn't bother me if the boat docks at SML got plenty of water, I hope they do, but also I'm concerned that I have enough water Brookneal to float my canoe. As long as I've got enough water to float my canoe, they can get all they want at SML. Gene said Terry, to generalize it, the way I try to express it is we're concerned when it becomes a system defect. If it's not a big defect to the system, that's fine. If the system operates the way it's supposed, okay; but when it comes to a big defect in the system we are concerned. Chairman Poindexter stated the real question is that it's people upstream are afraid that downstream permit requirements will prevent us from developing the economics of the future. There is too much that has to go downstream to accommodate it. Did I say that right? That is it. Terry continued and the point that I'm trying to make is, that is, that's your real interest. You really don't care whether it's inter-basin or intra-basin use. The reason that I would suggest that that's important is inter-basin transfer has so much emotional baggage attached to it that you lose sight of what your real interest is. I understand your interest, I truly do, so . . . I kind of agree to you up to the point that if it stays in my basin whether it's in VA or NC, that's my personal opinion. But if it goes to Carolina and then it goes into a 2nd basin and a 3rd basin then, boy that's where we, I think we have a real danger of ruining our economic future. Then it is out of our basin, okay? But now what, what is the difference in that? Let's say you're talking about 10 million gallons a day that you're worried about, just for arguments sake. What is the difference to your future well-being if you send 10 million gallons out of the basin or, if there's a co-generation plant that sends 10 million gallons in cooling water out, evaporates 10 million gallons in cooling water a day? The end impact is the same. The industry would be in the basin. It may not be in your locality. Bob Jean said well, it still would be in the basin. The industry would be if it was built in the basin it is close by it would be a lot better for me than if it were built in Durham. That's the point. John Lindsey replied the problem is, that each time you make an inter-basin transfer, you have transferred economic opportunity from generally a poorer section to a more highly developed section. You deny that transferring sending location the opportunity for jobs, employment, etc. to develop and you've given that to somebody else. It doesn't really matter where it goes to but, if, I mean, if you go, if it goes way ought to basin it's not making that much difference to you, but we're looking at Smith Mountain Lake, making sure there's enough water going downstream in Staunton River to encourage development in an area that does not have a large job opportunity. Scott Kudlas said John, I'm going to be the devil's advocate, but this is a very serious question that you really need to answer. Isn't that the American way? The American way gets lost between my way and your way. I would argue that if the American approach to management was to create equity across the basin, across users of a resource, across the

economic spectrum, we'd have a flat rate tax, we'd have all kinds of other thing that we don't have. The American system currently, because we've had riches and we haven't had shortages of resources has been what about promoting equal opportunity to create ?? And now the American way is, just like gas: if this area has gas the price will be cheaper than this area over here that doesn't have as much gas. Correct, but the question is about equity and money. Right and VA Beach received a lot of development opportunities with those 60 million gallons of water a day that are now denied to the area that sent it. Bob Jean added and in the future it will be denied when they may need it for development. Yes. Gene said and by the way, more affluent areas are taking critical resources away from a lesser affluent area is not exactly the American way. Exactly. Well sure it is. Say that again. The rich get richer and the poor get poorer. He is saying the get richer and the poor get poorer and that's the American way. Show me where that's not the case. If it is the American way, it's not right. That's the basis for inter-basin transfer in the US is the West Coast where, you know, the poor people in the central part of the Rocky Mountain area lost water to California. Someone said rob from the poor and give to the rich. We're getting close to Socialism here. Scott continued one of the things that . . . no, but the point is that, that's the condition that exists and until we have the political will to address it, you guys are putting square pegs in round holes. John Lindsey replied that's not the water rights, English water rights way. That's correct. Gene said that's why we need a very strong bi-state commission, right? Mrs. Janney stated I don't know whether I ought to ask it or not but I want an answer. I don't know that this is the place, but we're sitting here arguing over the dam. The other water, what happens when it dries up at the beginning of the source? Are you coming back after us? Can we produce water that's not there, because ultimately all that's going to have to go back to the beginning and we going to be held responsible if it dries up? It could. Phil asked if Kerr dries up or if the . . . If the source that feeds it. If the head waters of all this dries up, we're all in trouble. We're all in trouble. We'd do everything we can to try and avoid that beforehand. But that's, part of that is the drought management's plan as the local lake goes down everyone's required to use less, take out less. You know, end of the day, if it doesn't rain, we're running out of water; but, it always has rained up until now and we hope it always will rain. But we're trying to be more resistant during those times of drought when the lake goes down. '07 was the best example. That was the worst drought since we've been measuring them starting in 1930 and Falls Lake, someone mentioned, it was as low as it's ever been and it was in the 20s percentile of their water supply left. If it had not rained in the last 6 weeks all kind a things would be happening now that had never happened before. In fact, they were already beginning to happen. So, I mean, that could happen again, certainly could; but, that's what, but on the end of the drought, all of these things happened, the laws changed, drought management plans go into effect, people do things that they never did before for the next drought. Scott Kudlas, VA DEQ Office of Water Supply Planning; "Virginia's Current Regulations and How That Might Change".

Chairman Poindexter said Okay, let's move on along then. Scott, you're on next. We'll get in to it, we'll go on as we need to, but after this, you know, I wanted to skip committee reports if it suits the Committee and we'll talk about some of things that happened today and what we got?

Alright. The 1st disclaimer I have is that my presentation is not going to answer any of your questions, really. In part because your questions are bigger than the presentation and also because of the fact that this is a recycled presentation. I was on a panel at VMI a week and a half ago where I was talking about inter-basin transfer. It was a group of us, so this has a fairly broad brush, fairly narrow view of inter-basin transfer and that's what I'll talk about today. Now, Greg asked me to come and bring it, so that's why I brought it. Now, we've talked a lot about the fact that we have a lot of different programs and they're not exactly what we need to address what are our real issues. I think one of the things that all the folks in the room here can probably agree about is the fact that we can't probably continue to manage our water resources the way that we have in the past. We probably need a cultural shift in how we go about managing those resources. So, that's the first thing. The 2nd thing I want to say is, we need to be really, really careful when we talk about riparian rights. There's a tendency to talk about rights granted by permit as riparian rights and they're not the same thing. They mean very specific things, so we need to be careful about that because unless someone in this room here is a Circuit Court Judge none of you can determine what anybody's riparian right is. I can't do it. You can't do it. Only a court of law can do that. So keep that in mind. The corollary to that is that state agencies don't implement riparian rights. It may seem like a fine distinction but it's very important to understand. This is a trick question, I'll tell you that up front; but, IBT as you know stands for inter-basin transfer. Is IBT allowed in VA? You have 3 choices: Yes, No, or All of the above. C, everybody agree with that? Well, I would agree with you, I think the answer is C. It depends on your perspective and it depends on the legal foundation you're using to justify your position. There are 3 common bases that you hear people talking about why they believe inter-basin transfer is or is not "legal." They either use the riparian doctrine, they talk about the statutory framework that we have in VA and those are laws that are created by the General Assembly, or they talk about the regulatory framework that we have and those are laws that are part of the administrative code that the agencies developed.

Now, it's really curious to me that folks want to talk about the riparian doctrine as the basis for a lot of this issue associated with inter-basin transfer but, basically the riparian doctrine says that the right to use water and lakes, streams, rivers, belongs to the owner of the banks and such water bodies. Okay, there are a lot of limitations on that right to use, okay? First of which is and I don't know how many times I've heard it, it's not your water, it's not my water, it's not a right of ownership, it's a right of use, okay? You have the right to use that water so long as you do not harm another riparian. Public water supplies and this is very important because I think it's the foundation of the whole discussion about inter-basin transfer, is public water supplies have no special status in the riparian doctrine. They're just another riparian owner if you own land that abuts one of these water bodies. So you have the riparian right to use that water on that property, okay? Not to distribute it, but to use it on that property, unless everybody you're distributing it to lives on that property. You can't change the quantity or quality of the water, that's a principle of the riparian doctrine. You need to keep it within the basin and we have a 1972 Attorney General's Opinion to that effect that confirms that in VA. The key is and I think the reason that we haven't seen more lawsuits until today is that you have to justify your position as showing that you've been harmed by that other riparian's



use. When there's plenty of resources to go around and everybody can get the amount of water that they want, it's awful hard to demonstrate to a judge that someone's been harmed if they can take as much water as they need. So now that we're butting up against our resources ability to sustain the demands that are being put on it. I think you're going to be able to see more and more people be able to take these kinds of things to court and perhaps be able to demonstrate harm. · Okay, statutory framework. Inter-basin transfer, we do not have an inter-basin transfer law in VA. It's not even mentioned in the entire Code of VA. The regulation, control and development of the use of State waters for the purposes beneficial to the public are the jurisdiction of Commonwealth. So we have an overlay of regulation that regulates how those uses occur. Waters, means all water on the surface, under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction which affect the public welfare. So some people have interpreted this to mean that, in fact, the Commonwealth owns the water. There are some folks who would dispute that; but, we definitely have the right to regulate it. And yet public water supply is the highest priority beneficial use, so you see a lot of people mixing and matching the language of their concept of the riparian doctrine and what they know about the statutory framework. You see people saying that I have a riparian right to that water and by the way, I'm a public water supply so I'm the highest priority beneficial use of that water in the State of VA . Therefore, I'm special, you need to treat me differently. But I'm here to say, don't mix and match those things as that's a problem. Gene Addesso said can I offer some area that causes the problem? I'll read you the 1st sentence from Legislative Intent on Senate Bill 1360, State of NC. I understand you're saying now. The 1st thing that it says, the General Assembly declares the water resources of the State common law riparian rights are subject to regulation by the state. The waters of the State are a natural resource owned by the State the trustee subject to the public sovereign power to plan , regulate, and control the withdrawal and usage of these waters.....So this conflicting understanding between NC and VA and difference in the law that causes a problem for Roanoke Basin. Because you could be on one side of the basin reading something and evaluating a permit and you got a different law than you have up in VA. Well not really, I mean, all the laws in VA also have a little enactment clause that says that these do not affect riparian rights. I thought you said VA has no, the word riparian rights isn't, as in . . . No, the word inter-basin transfer. Inter-basin transfer. Inter-basin transfer. Yes. But, you have to understand that mixing of the different approaches, and no offense to Mr. Poindexter, has been perpetuated by the legislature. Everyone wants to reserve the rights that they think they have, even if they haven't been adjudicated and yet they want to regulate the rights of those folks who would come in the future. So, it does create a, some tension sometimes. Bob Conner said back on the riparian rights, I know on Lake Gaston and I'm correct on Kerr Lake, the federal government owns that land around Kerr Lake. Dominion Power owns the land around Lake Gaston. I can't cross Dominion's property . . . Correct. .... to pump water unless I'm permitted by them. So even though I'm there now some of farmers, including my family, do have riparian rights as the water drops we can go, cut trees, and we can harvest and that was an agreement in the sale of the property that was farmland years ago. Right. Only a few still have those rights. And that's a condition that's unique to impoundments for the most part.

· If you do a search of the Code of VA, the Administrative Code, inter-basin transfer is not

mentioned there either. So, one of the things that you need to understand that, I would argue, is as good as what's in NC, it's just different. We review every application for a withdrawal on its merits as a withdrawal. We look at the need, we look at the timing of that need, and we look at the impact, including the impact of any portion that may be consumed or removed so that it doesn't make it down stream. So, in the evaluation of the VA Water Protection Permit Program, we evaluate things that ensure that we don't overuse the resource and those existing in-stream and offstream beneficial uses are protected in the future from any of those new or expanded uses. That's really what the focus of that permit is. We also then take a look at discharges and we look at how those discharges from wherever they come from. We have a lot of discharges that are actually greater than the withdrawals associated with them and that can come from I and I problems in the system where you get groundwater that seeps in and so you have a greater amount of water being discharged or it could be water from an adjacent basin. What we're looking at there is: does that additional water have an affect on the physical, chemical, and biological processes that we're charged to protect? So, I guess what I'm saying is, while we don't have anything in the VA regulatory scheme called inter-basin transfer certificate or whatever, we still look at the same kinds of issues and I think the evaluation for the resource is at least equivalent. · So, it's kind of interesting here. Inter-basin transfer, it's not really a riparian right, it's not prohibited by the statute, it's not prohibited by regulation, so what does that really mean? Well, what it really means is, it's not an issue until we get to the point where you guys are worried about your future economic development or where we have a shortage of resources that then makes you feel like you're not going to be able to achieve your goals in the future that you need from that resource. So it's not an issue until the level of growth requires public water supplies where you have to actually transfer it from those abutting properties. · So, I'm going to argue to you that, public water supply is really at the heart of inter- basin transfer. Public water supplies necessarily remove water from riparian land and distribute it beyond the riparian parcel. I think that's kind of a given. Increasing water needs across both states, I think, in fact, all of the East Coast is creating greater scarcity in the supply. So these issues become more important and more emotional to folks. Many public water supplies already include inter-basin transfers. It really depends on the scale of basin that you're looking at to determine whether or not a transfer exists. The last time we did that comprehensively in VA was at the time we adopted the VA Water Protection Permit Program and that was back in 1989. There was some, approximately 40, inter-basin transfers that existed at that time. I'm sure there are more now. But they occur at very different scales. At the scale that you guys were talking about from the Roanoke Basin to the Tar Basin, there were approximately ½ dozen of those. All of the other ones occurred at a such smaller scale. And I think here is the issue that as I think we'd finally gotten to, that concerns you the most. The have-nots, the way things are currently done, are not adequately protected through the Riparian Doctrine or the statutory or regulatory framework, or at least you feel that way. I think, and I'll make this point one more time, I think one of the things that's really important to take away here, particularly on that last bullet, is that as long as you have adequate supplies, you can postpone that important policy discussion about whether or not the equitable allocation of resources within the entire basin is the policy that you want to adopt as a Commonwealth or as a body. We haven't really addressed those issues to my knowledge anywhere in the Country. Gene

Addesso said back on your previous slide, what you just said kind of hit me. It's not an issue when the sources are adequate to meet one of these, not an issue until the level of growth requires public supplies. If you have events occurring and you've got projections that make you get to a level of certainty about the fact that it's going to be an issue, what do you do, wait until it happens or you act now? Well that's the question before you. Yes it is, yes it is. Frankly and the other thing I would caution you about and we struggle with this a lot as regulators but, I think we all have to admit that none of us can really predict the future so we have to accept a certain uncertainty in the projections for our futures and what I see a lot is Locality A saying that Locality B's projection is really unrealistic. Well, they're probably all unrealistic in one way or another. I think to the extent that we can accept that a little better up front, we can have the kinds of dialogue that we need to have where a reasonable man can talk about what's really needed.

- Okay, let's do a little review. Public water supplies may not have a riparian right to the water or the right to distribute the water off the site of the withdrawal. Is that true or false? True. True, good. Public domestic water supply is a beneficial use of state waters that may be issued a permit to withdraw water? True. True. Even with a valid state permit a public water supply may be sued by another riparian if the withdrawal or the transfer that the water can be shown to have harmed a riparian land owner. True. True. So even if you have a valid permit, you can still be sued. That's why we have lawyers. That's why we have lawyers, well if, I mean, that's the option that is before you. Do you want to be in court for 20 years, 30 years working these things out? Or do you want to get people to the table and talk about these things? Bill Brush replied well Scott, wouldn't a, I mean this is idealistic, so, it's not realistic, it's idealistic and I'll be the 1st one to say that. Obviously what should have happened, we had a plentiful supply so we never worried about it, but obviously what should happen is every county, every municipality, every place where people live in the country should determine how much the land, how much population the land really can support in terms of water, or in terms of other, other commodities and then growth doesn't go beyond that point and then you would . . . Well, I mean, that's a very interesting idea and not inconsistent with something I'm going to say in a minute.
- So what do we do in VA in terms of inter-basin transfer? Basically we look at it as a withdrawal and a discharge and we regulate those activities within the context of current regulatory programs. There's no assumption independent of looking at the analysis of what those impacts mean as to whether or not an inter-basin transfer is good or bad, okay? And we have not established any, I don't mean this negatively to the folks from NC, but really, 2 million gallons a day is an arbitrary threshold. Someone has determined that that's a de minimis amount and you can transfer that amount without having a problem. We look at every transfer at its merits and in some cases where you have a very small source water system that may be important. 2 mgd may have a big impact on that system and that's the philosophy that we use in VA. I think what I'd like to add to this is that we have, it was alluded to a little bit earlier, we have the VA water supply planning process that I talked to you about before. One of the goals of that process is to, for the 1st time, have a locally generated state-wide snapshot of what the local needs are and what alternatives their considering for addressing those needs is for the next 30 to 50 years. So we at least have a least common denominator of 30 years. When you have that information it really helps you understand where we're going to have these issues that have risen here. Where you have a system, where you have multiple jurisdictions who

have a desire to meet their water supply needs from the same source and in some cases that's not going to be able to be accommodated on its face and that's something that I think will lead to greater discussion at the policy level about how to manage this issue and how best, if the regulations are required, to do that. Terry Wagner added one other piece of that water supply enabling legislation, we are required to encourage regional water supply, so when you think about regional plan, you could interpret that as instructions from the General Assembly to favor things like inter-basin transfer. Gene said but Terry, they didn't say one-way pipes, they said cooperation. Regional Plans. That doesn't mean a one-way pipe. Scott said it may or may not, it doesn't say, it's not clear. Terry added it depends on where you are in the basin. It depends upon your perspective. I see no problem in having regional water systems where basically you share in the supply, you know, my neighbor needs help, I help my neighbor. But when I need help, I want my neighbor to help me too; I don't want it all going one way. Chairman Poindexter asked are the supply plan we're doing now is really municipal plans. Terry said no sir. Scott indicated they are local or regional. Chairman Poindexter asked what about the industrial side of it? That is a requirement. When we prepared the County plans several years ago was limited to drinking water. It was limited to economic development. No. This happened in 2005, so your group, you're Franklin County? Ye s, you're working with the Region 2000 and with the upper basin. The only numbers that we gathered were drinking water numbers from each locality. Well, that's just because that's how far you are. It's not because you haven't completed the plan. Terry added in VA a local or regional water supply plan has been approved. Public drinking water sources, estimates of ????. Let's forget about what's existing, the folks on the plan. So you're looking 30, 50 years out and public supply water needs are going to be, what portions of your planning area, whether it's one locality or multiple areas are going to be served by private wells, where you expect to see major industrial growth, commercial growth, agricultural usage, it's across the board. I stand corrected. I just did not remember the industrial use of it. Scott continued right and that projected need is disaggregated by those uses. Terry said and you know that's a tough call because in a relative sense it's easier for a local government to predict what their population may be in 30 to 50 years versus what industrial clients they may be able to attract. Scott said if you want to have another talk about some tips about how to predict some of that economic growth I can help you with that. What could change the approach that VA currently takes? It could be a change made by the General Assembly or we could be directed by a future administration to make a regulatory program or policy change. Congressional action, which you guys talked about earlier, that's a possibility for changing this or, you know, the EPA or the Corps could make some change in their regulatory programs or their policies that could also affect how this plays out. And one of the things that I think the Water Supply Plans will show is, based on our understanding of the availability of the resource in certain areas of the State, are we facing an overuse of the water resources that will lead to a shortage or limit it's supply of availability? That could drive change, as well as political conflicts among the localities or neighboring states. Most of you have probably experienced the fact that change rarely happens without conflict. So usually there's some conflict that takes place before there's some change so. Let's hope we can minimize that, but what I'd like to submit to you is I think those last 2 bullets are something that the State Water Plan that comes out of local and regional water supply

planning process will help illuminate what those issues are for the positive . Alright, any questions?

Bill Reidenbach asked if I live on a lake with water rights and my 1st responder is a marine fire company and the riparian downstream take more water from the lake than goes into it, so it's got my shoreline receding from it, alright, now it catches fire and I can't receive fire support or help, have I been harmed under a riparian condition? I can't tell you, only a Judge could tell you, but that's the kind of example, I think, that a lawyer could tell you is something that you could pursue. John Lindsey added his property is in the 1st new area for the marine fire. He is receiving a discount on his homeowner's insurance based on the marine fire's ability to fight fires in that area. Now, if you drop the water so that the marine fire cannot discharge its obligation. Where is your liability? Only a judge can tell you.

Other Business:

Bob Conner stated I want to say this, that most of us around here this Committee from inception date to and travel all over the state on Roanoke River Basin and I would have to say that over the years, this has probably been the most productive meeting, Mr. Chairman, is to have things come out from the state and the federal government and I'd like to see more of it . What we really need to do, this Committee has not met with NC, but I'm looking forward to the day that we could sit down at the table with NC, discuss our issues. They have issues and we have issues, and there's a means that we can come together and resolve these issues and not to get into litigation. Everybody thinks get into litigation solves the problems, all you do is spend money, spend money and so, Carolina has a need and VA has a need and we just need to come together and so I thank you for a good program.

Read Charlton agreed saying this had been a very useful meeting. I'd like to recognize all those people from NC that came up here today, of course.

Chairman Poindexter said it looks to me we got a few more things to talk about. One is what action, if any, do we want to take about the water level/flow protocol, the 1st briefing today. A 2nd is there any legislation or any other recommendations to the General Assembly based on what we've heard from the state and feds today. And I think, 3rd I'll make a comment, I have not heard much sentiment from the other legislators on the Committee that indicate they want to discontinue what we're doing. They want us to keep going.

John Feild said Mr. Chairman I think that we should probably draft some kind of communiqué to Virgil Goode, John Warner, and Senator Webb elevating this thing to the Congressional level. That will provide further grist to the USACE to get some guidance from on high relative to the allocation process and what the future portends. With the information that the Corps has provided, that's probably the only vehicle where we can surface the issue that would might provide some relief to the citizens within the Basin if the 1st come 1st serve doctrine is still maintained. Otherwise the citizens that reside in the

Basin do not have the political clout to protect the resource for their future economic development and whatever fair percentage that there is. I agree with the various presenters that we are going to be piping water all over the US, within states, and across state lines and so forth. I think the concerns of our Committee have already been addressed in our initial resolution that was adopted wherein we were opposed to any inter-basin transfer that there would have a detrimental impact to the Basin. It was a qualifier, it was good political jargon, it didn't have a lot of substance, but the thrust of the resolution was that we didn't want to see the Basin impaired for future generations or our economic development ability impaired. So, I would suggest that we craft some type of communiqué to our Congressional Delegation indicating that the Corps has agreed that unless they get guidance from Congress that the 216 Study currently ongoing was not going to be vehicle wherein this issue was going to be serviced and addressed because it's 2 sponsors decided to take it off the table. And therein, it's not the Corps fault, they have to do with what resources and what their sponsors are willing to support and what I heard was that it's going to take Congressional guidance . . . Chairman Poindexter interjected for the Corps to set policy for storage. . . . Well, they can go to the Corps and ask for help in drafting legislation. We heard that today, I think, that they have, at the Chiefs Office level that will work with the Undersecretary of the, that relates to the Corps . . . The Corps has a governmental affairs office. Exactly and we're not looking at the Corps as an adversary but, they will be an arbiter in the allocation process. It would appear that, based on the water needs being experienced during the drought, but it's going to go beyond the drought, it's going to be an everyday occurrence here in the East, as evidenced by the various litigations that are going on state to state, that some guidance is going to be necessary in the future. It might be raising the hierarchy of what allocation, it might be going into the conservation pool, the power conservation pool, to adjust that, tweak that so that there's more water available for allocation. Using the 1st come 1st serve doctrine, if Raleigh comes with a 50 million gallon per day request, that's going to translate to 10 to 12 thousand acre feet of water out of Kerr Reservoir based on VA Beach's allocation for 60 million required. I did some math here and so with, it's in that ballpark, but when you start looking at the future demands, what is left is not a whole lot. I think we said, what, 28,000 acre feet are available for allocation? It's about 1/2 of what was available. It's roughly 1/2 but that doesn't include the increased request from Kerr Lake Regional Water System to go to 20 to 25 million gallons. It doesn't take into account Raleigh and/or Durham's request that could be forthcoming. I think it would help all of us to have this issue elevated and guidance provided because the Corps is, dependant upon the Courts right now. That's where you are, are you not? Hank Maser the Corps is developing guidance and . . . As a result of Corps decisions . . . Yeah, that goes into it, I mean, we're developing guidance at our headquarters level based on our experience. Up until this point, up until the last few years, we haven't had these issues to deal with and so 1st come 1st serve guidance worked. Now we're recognizing that we need to do something different, a lot of questions are coming up and we're asking ourselves those questions. Right. Well, if we grab this, crafted our communiqué to support that endeavor by the Corps to upgrade their guidance, I think . . . Chairman Poindexter said this issue of policy here for the Corps should be determined of the policy of the US Government. Well that comes down to the crux of it and the only re-dress that we have, here locally, within the Basin, since we're politically poor, is legislation that

offers up, yes we going to accept some type of inter-basin transfer, but we would like to see a certain percentage of the water that's available for allocation being reserved for the citizens that reside within the Basin. In this case 80%+ originates within the Basin, 80%+ is stored within the Basin, yet 90% is going to be allocated outside the Basin. These are figures in my head; you can't go to the bank with them. That's what we can see taking place so, I would suggest that we need to craft some type of communiqué to our Congressional Delegation in support of the Corps redefining their policy and/or providing some protection for the citizens of the Basin. It is not just Corps projects; it's all federally operated projects across the country. The Corps would have about 400 or so projects around the US, 400+, and this problem is probably the Bureau of Land Management, Department of Interior, all of those federal entities that have lands and ostensibly some type of reservoirs on the properties, could fall prey to this. So, I would suggest that Mr. Chairman. Chairman Poindexter said I understand you would need 2 things. One would be policy guidelines and relevant and 2nd would be some element of protection for local economic development in the region, something like that. And if it means providing funds and getting the state sponsors, NC and VA to step up and say, this is an issue, it needs to be surfaced during the 216 Study. If the Corps gets some additional funds for the 216 Study to help augment this thing, that's another vehicle. I don't think it's going to go away and I think it'll be more eminent as time goes on. I'm not sure what we would put in for the 216. Just mention that it's ongoing and that no element of storage allocation or little of the storage is being considered in it. Well, it can't be reserved under the current policy for use by citizens within the Basin and it's the 1st come 1st serve doctrine that is held sway up until today. It needs to be looked at and some safeguards added for the citizens within the Basin. I think that's part of what we're concerned about, it's not so much the consumptive use or the out of basin transfers, we get some back, the biggest thing is that the birthright and we talked riparian law as one method of addressing the concerns of the citizens within the Basin, what is riparian law when you have federal ownership of a reservoir and the land around it? You actually, you actually are adjoining federal land; you're not a riparian owner. You wouldn't have access to the water if the Corps hadn't put the dam in and held back the water. So there are all kinds of legal issues that could surface on this thing. Are there federal legislators other than those 3 that should be involved in this? Well, those are the ones that I know. We have the 2 Senators and we know that Virgil Goode covers at least 1/2 the Basin. Yeah, but there should be some others. Does Virgil go all the way to the Carolina line here? Bob Conner stated he is in my District. Gene Addesso asked would it help the USACE if the Advisory Committee sent that message out? Bob Conner responded I think it's good to go to them, but I'm, in my mind, the way I understand they operate in Washington, and you all correct me, is that, we can write to our Representatives up there, but wouldn't they have a Committee, there are Committees up there that study different things and make recommendations. Hank Maser asked in Congress? Yes? They do. I don't know if they would in this case. Typically if you write a letter to a Congressman or a Senator it will come back to the Corps with a request for us to respond to it in 24 hours. We'll spend a lot of time telling them what we're doing and then if they're going to change something they basically would have to introduce legislation. We don't want to put a hardship on you all. You have to do what you feel is important, you know, which way would it go, could it help, could it hurt? I don't know. Steve DeLange stated Hank's just trying to tap

dance and doing a darn good job of it between advising you guys on what to do politically, 'cause we can't do that, we should not do that and we will not do that. Our guidance, our policy on the 1st come 1st serve which is not that simple, it's really not. Terry was trying to say, look there's a lot more wrapped up in that 1st come 1st serve, there's has to be an immediate demand and need that, it's not a presupposed, but it's actually part of that process. Our policy could use some updating, but is the federal government going to tell us, here's your new policy. I don't think it's going to happen. It's not going to happen in the timeframe that you all need it to happen. We've got active, potentially active requests in front of us that may or may not, you know, use up the remaining 50,000 acre feet, Then we, then go to the ASA, this is the Secretary of Army for Civil works, and say put your neck out on the line and let's stretch this out and hope we don't wind up in court because one of either state disagrees. Or do the states get together and NC, to their defense, has been doing these water planning studies since '92, I think, so they got 2 or 3 basins done and about to finish their 3rd and 4th. So they may not been at the Committee, but they haven't been sitting around doing nothing, from what I understand. Or do the states get together and say, okay here's what we need and here's what we'd like to see and now go out and we've decided who get what for you now go ahead and allocate it and we'll figure out the rest. I don't know that answer, but what I do know is I don't think you're going to fit a whole, that you'll get a lot of distance out of asking for the Federal Government to legislate who's going to get water. Hank interjected for Congress to legislate. Making some policy as to what we should do in the interim but that's . . . John Feild replied well, with all the litigation that is going on and you're a lawyer and probably far more knowledgeable in this arena than I'll ever be, with all the litigation that's going on in the various states up and throughout the East, it would seem that there would be plethora of co-sponsors for type of legislation to remove this stuff from Courts and give it back where it ought to be. I would think that if a Congressman was worth his salt, this would be an issue that he'd want to be on the front of. Well, you know the FL/GA/AL they actually had a compact that was approved by Congress, but the compact didn't go far enough, it went as far as saying, we're going to get together and work this out. Well, obviously they didn't work it out. They almost worked it out, they came real close but then they sued each other. So, again, it wasn't the Courts tying it up and it wasn't the Corps lack of policy, it was the states not agreeing with each other. Is our policy adequate right now and what needs to be done to fix it? You know, we've already made the calls up to headquarters before we got here. We knew these issues would come up. We actually were kind of hoping we'd get through without any of them, but I guess we were unrealistic. Hopefully we haven't been too unkind. What happens, and I think you raised the issue, when you've got the individual business owner that says I want 15 mgd to make millions of dollars. Then you've got the City that says I can't turn the faucet on and have anything come out of it . So they both come to your doorstep at the exact same time with the request or the business owner gets there 5 minutes before. What do you do? Is it 1st in writing? You know, how do you then determine this? So we asked that question and they said, well, you know, in the 50 years we've been doing this we haven't had to address that yet so . . . Bob Conner asked is the higher ups in your organization aware of this. Hank Maser said there is communication up to our HQ. The Secretary is engaged in a water wars in AL and GA so, he's very aware of the issues and tends not to get down into the weeds of the details. John Feild asked well, would a letter



to the Corps to the District Office, to the District it would be forwarded up, does that have any substance, does that have any impact at all or are we wasting our time writing Col. Pulliam from the Corps to forward it up that way or do we have to come down the other way, that's what I'm hoping to get some guidance on. Hank Maser stated let me tell you this, right now I, part of my responsibility to support the Commander is to make sure that we implement water management in concert with current law and policy and accord. I've got an issue that I've got to deal with so whether you write a letter or not, Allen and I and I'll get Steve involved with this, we are going to be talking with our Headquarters to clarify what policy we should be using to look at what we've already got on the table and I let you know what we've got on the table now. So whether you write anything or not, we're going to be addressing this issue as hard as we can because we've active issues to figure what to do with. Bob Conner said my opinion is that these guys know what they're doing. They know what the problem is. You have good point about writing to Congressman Goode and the others, but I know what's going happen there. You send a letter down there and somebody's going to say, hey, you got take care of this. They going to be spinning their wheels to respond to him and all that is a stall tactic. We've written to the Corps of Engineers and the Corps of Engineers going to look into this. I'd rather for you to follow your process. In my opinion you already know what it is, what the problems may be on the horizon and then come back to us at our next meeting, one of you all and say, look, this is where we are on this. Terry Wagner stated I think that there's one thing that you said, one of your desires, and that is to reserve a percentage, that's not in the works anywhere. So, that's an issue in and of itself that we do not have the current authority either at the Corps or even the state level to address. If that's really the, I'm not sure how to advise you on how to do that . . . John Feild responded well, that's like a Roloids , it would take some little of the heartburn away of the people that we represent here from our various political subdivisions within the Basin. They would see we are addressing the concerns as they've been voiced to us. If and when we do get an economic development package in here and they need water, have you'll done anything to provide, make sure we've got water if we want to entice an industry? Under the current policy, we could get up and have a beautiful reservoir and we could have all kinds of recreation benefits coming from that reservoir and they could be adding to the tax base from the adjoining homes and how they're evaluated, but we're not protecting those owners from the things that we've addressed today. The only way I can see that we can service that since it's apparent that the 216 Study is not going to be the vehicle and I wanted to explore which one would be the possible vehicle, to possibly change the policy that would require all Federal reservoirs, not just USACE, but all Federal reservoirs to reserve a fair percentage, again political language, so that the citizens within the Basins affected by these reservoirs can be assured that even though they're politically poor and they don't have the population and the votes here and there, but in the initial legislation or the tweaked legislation those politically risked areas can say, that's only fair. Let's rest assured that that gets in there. That they get a percentage that's allocated for them or set aside for them. They don't have to be 1st in line because their need probably won't come until 20, 25 years down the road, when and if industry decides, well, the traffic's too high, the taxes are too high, we've got a resource out here in the country, the tax base is lower, and the rate of pay is lower. Let's move and relocate, then we'll start getting the equitable distribution of our economic development and growth. I know it's not the

American way Scott, but . . . I'm sorry. Gene said I believe this is the American way. We talked about growth in both population and industry, right? And it was suggested that they're different, they're very much related. I have a youngster growing up in a poor community in South VA and when he graduates from school he's trying to get a job. He'll probably find it up in Richmond or he'll probably find it in Raleigh, he's not going to find it there. However, if we do get industry in the area, guess what? He'll stay close to home won't he, he won't move. Alright, so this is a great relationship and that's the American way, as much as the other way. Bob Conner said being devil's advocate, how do we know what percentage to ask for if we don't know what our long range plans are? Chairman Poindexter said we don't. We ask as a matter of policy for that to be considered in their study and development of the policy. Bob Jean remarked we'd have to take whatever crumb they would throw us, but whatever we get is better than what we got now. John Feild said even a heel of a loaf is better than an empty container. Bob Conner said I think that would be a better approach is to consider that than putting it all back on Corps and they have to spin their wheels and still get nothing done from Congressional leaders up there. Phil Fragapane said Mr. Chairman, this idea of a percentage reserved within the Basin may not be without precedent because in NC at Jordan Lake, the State of NC, as I understand it, has an agreement with the Corps for water supply storage in that lake. Then the State allocates that water supply storage to people who request it. The law about allocating that includes a clause that says 50% of that allocation must not leave the source basin. So, there's something already existing, you might want to look at that. John Feild said thank you. Thank you. I mean, that's what we don't have at Kerr. But it could be incorporated and the precedent could be referenced. Alan Piner stated he's exactly right, but the State of NC stepped forward and purchased that entire allocation for water supply back in the late '80's, yeah, '89, '90 timeframe. Alright, thank you. So the State of NC owns that allocation within Jordan Lake. Hank Maser indicated Kerr would require a joint ownership of VA and NC to straddle state lines. So States could come together and develop a combined water storage agreement. Alan said it really truly does come back to your local and state input. John Field responded well I was just trying to see where we ought to direct our energies because we're flying by the seat of pants, as you can tell. We have one of House of Delegates is Chairman here and we've had adequate support from Frank Ruff and Tommy Wright and Congressman Goode is very attentive but if not in person, by at least his representative and since we haven't had the luxury of meeting with our counterparts from NC and we've labored for 5 years now, waiting for them to come to the table, our mission is been somewhat clouded and taken a fork in the road in that we're serving more as an advisory body to the General Assembly and trying to maintain our knowledge base and a meaningful mission for our membership. As you pointed out a number of times Robert, if we just going to send something up and it's a tacit acknowledgement that they've got it, then you never hear anything else about it or if we don't have a mission that has some meaning, I'm ready to fold up our tents. Bob Jean stated is there any way that we can, for lack of a better word, put any pressure on the powers that be in NC to send their representatives. Bob Conner said we've been through this and we've been down the road and we can't put pressure on them. Where the pressure can come from and he's now in that seat, he's both hats here, the Governor appointed 3 people of which 1 has resigned so we need a new appointee. The Governor needs to move forward and the General Assembly needs to move forward. We were

approved by the Clerk of the Senate to serve on this Committee after being appointed by, me through Southside Planning District. I feel real good about this meeting today and we getting off a your subject, is that we had a lot a input, I feel like I'm better educated on some of the things that are going on that I best would be able to convey to the people that I represent in the lower part of the Roanoke River, namely Lake Gaston. And I, be honest with you Mr. Chairman, I frankly was about ready today when I got here because we've been spinning our wheels and I've got a lot of other things on my plate, is to tender my resignation. I'm not going to do it today in light of what was presented and I think we need to keep pushing forward. But we're not getting the backing from the State of VA. I'm trying to answer your question. They may say they have, but we never have and if it wasn't for Greg's keeping records and keeping us posted on what's going on and he's done an outstanding job, I don't know where we would be today. I'll stop some of you older guys that's been on here from the inception can add to that, but that's what we preach on every month, every time we have a meeting. We come and we listen to 1 thing and then we talk about what is the State going to do, can we pressure the Government? Apparently NC, correct me, is ready to move forward. Do I understand that, do you have any knowledge? Their committee, at one time there was no committee appointed. They hadn't even appointed a committee. Do you know? Phil said the Roanoke River . . . Right. Yes. . . . I really don't know, but I'm going to carry back to Raleigh. Brian McCrodden said I do have a little, even though I'm not in an official capacity, I do have a little information I think. I know that the appointments have been made and I think I sense that there is some movement to get going and I would suggest and Mr. Chairman I don't know who the appropriate person is or body in the Commonwealth to do this, but if you want to give them a little nudge, call the Director of the Boards and Commissions Appointment Board. I could get you the official name of it, and have them start chasing the rabbit. Then I think it may move. Chairman Poindexter said so there's members who'd be appointed by the . . . They have been appointed. . . . Okay, fine. It's just that they haven't met. I think we ought to do that anyway. Greg can make that contact with the NC people. Greg, if you want to send me an email . . . Alright.

· Chairman Poindexter indicated we've got a couple more things to go but he wanted to but this one to bed. We've got a suggestion on the table that we go ahead and send a communiqué up to our Federal Representatives suggesting that they keep an eye on the policy development and that type thing that the Corps is doing, John laid some words out. How would the rest of you feel if we go ahead and draft that and send you an electronic copy of it and give us a little while to look at it? That sounds good. I support it. We've got everybody online now right? Greg I'll help you with the 1st draft if I need to but I think you've got enough to put it together. John Feild said Greg, while you're doing that letter, if it's the will of the Committee, I would suggest that we send a letter to Colonel Pulliam thanking him for the delegation that came forth from the Wilmington District. These insightful presentations that we received that greatly expanded our knowledge base on the process and procedure and give them a stroke because they deserve it. And the same thing to DEQ. Super effort coming all the way down from Richmond, I know it's not quite as far as Wilmington but the fact that we were able to get personages of your standing on these issues is significant to me in recognizing the fact that these are important issues. Gene Adesso I think we owe you the same with the Roanoke River Basin Association. Thank you. · Chairman Poindexter said now we've got one to finish

and that's the 1st one. That has been on the plate for a long time and that's the water protocol release up and down the river. We had a presentation today that, I felt at least and I hope most of you felt, is an approach towards win-win for everybody and let's get together and work it out type thing. Do we want to make any follow up on that? John Feild replied if it has any meaning, something crafted and sent forward supporting the presentation that Bill Brush made to us, I think would be appropriate. It could be appropriate for that to go to our state people, right? Read Charlton remarked yes, I would support that too. John Lindsey said Mr. Chairman, if I may, there's a couple of issues there that are involved in that re-licensing application that I am here to represent the upper basin and I am concerned with and the 1st one is the lack of AEP and/or the state agencies anything, anywhere in there to recognize the public safety issue that is caused by excessively low water conditions on Smith Mountain Lake. I have statements for anybody that wants them of the, from the Coastguard Auxiliary of the impact on their operation on low water and from the Marine Fire Department on the impact of low water on their operations. And both of them center on the 792 ft. level as the point at which their operations become particularly hazardous especially at night. That is when you can't see the shoals and your visibility is limited. You saw the pictures of the fire boat that was parked there and unfortunately that one's not fighting any more fires. Whether it was caused by that grounding or not we don't know, but it sank at the mooring from cracks below the water line at the transom. What I would like to ask is that this Committee put together comments that would go forward to all of the state agencies, to FERC, AEP, all those that are concerned and ask them to re-evaluate the information, the testimony of all the witnesses that I'm concerned that due recognition of the importance of maintaining safe conditions for those 5 million visitor days on Smith Mountain Lake is important. I'm in the position of feeling that maintaining safe water levels for the 3,000 boats that the Game Wardens, sorry Conservation Police, called, reported more than 3,000 boats involved in the fireworks display on the Lake last year. At 4 people per boat, that's 12,000 people. At 5 or 6 people, you're looking at 15, 18,000 people out on the water at night, many of them not being regular on the Lake, not knowing the Lake that well, and when the fireworks are over everybody's in a hurry to get home. It did create some hazardous conditions. They've now set up what they call a 'No Wake Fireworks' and so there's wake within the 1st mile on leaving the fireworks site. So I would like to see a letter asking people to re-evaluate their positions and expressing our concern for a lack of consideration for maintaining safe conditions for our tourists and visitors on Smith Mountain Lake. I had a draft that I'll circulate and again, this is only a draft, but it gives you some of the ideas that of things I believe should be covered, especially the one that's an issue on safety. Now this is just a rough draft, but at any rate, it notes that we want a review by all addressees to assure that the opinions of all of affected citizens of the Commonwealth are fairly and equally heard and considered, in particularly as regards to management of the water resource in the Upper Roanoke River Basin. There is a little blurb in there about the, the Committee is deeply concerned by the apparent omission of the impact of low water levels, actual levels below 792 feet on the operation of Smith Mountain Lake Marine Fire Rescue and Smith Mountain Lake US Coastguard Auxiliary. Both are all volunteer organizations dedicated to the safety and protection of the 16,000+ full time residents and the 5 million visitor days estimated that used Smith Mountain Lake in 2007. The Fire Department ran a survey and determined that 16,000 are year-

round residents. They determined that in the summer time, during the height of the recreation season there's approximately 54,000 residents in the vicinity of, right within the 1st couple of rows of houses on that Lake. So we're not talking about small potatoes. We believe all visitors to VA recreations destinations have a right to expect a reasonable degree of protection from unnecessary hazards and reasonable fire and safety support for accidents and other unforeseen incidents. The only reason Smith Mountain Lake water levels go down is because more water is released than is coming into the project. You just can't keep taking it out if it's not coming in. Generation at Smith Mountain Dam does not consume or release any water, rather it simply lowers the level of Smith Mountain Lake by up to 2 feet until it can be pumped back into the Lake from Leesville. Generation is controlled by the power plant company from its Ohio offices and is not an issue in this part of it. We feel that the visitors to our Lakes should find reasonable facilities to launch and recover their boats and meet the on-water needs for fuel, food, and other personal necessities. Shoreline management plan limits dredging to 789 feet, 6 feet below full pond. It's interesting because the Corps will allow dredging up to 8 feet below the surface at almost full pond. AEP saw fit to make that 6 foot below full pond, which is 795. Normal Lake elevations historically are in the 792, 793 range and these are actual elevations, these are not adjusted. 794 less the 2 foot power pool put you at 792 and now we're at the level where we're beginning to become critical. Power boats, Coastguard Auxiliary, Conservation Police, and most civilian craft require 3 to 5 foot water to navigate safely and they cannot access dredged areas of the Lake including public marinas and boat slips when the water levels are down more than 2 feet. As a sideline, Bayrock Marina dredged their water pumps, their gas pumps, so that they could accommodate visitors. The Lake subsequently went down 3 feet last summer and they still could not access the gas pumps because there wasn't, there was less than 3 foot of water where they dredged. The situation they're experiencing, there are over 100 slips there and people would take the boat out in the morning for the day. AEP when they start generating power, usually start around noon and start drawing it down. By the time the people would come back to the slip the water was so low they couldn't get the boat back in the slip. Now here you are, sitting out there on the water, looking at a sand bar, you got your kids and the wife and everybody on board, what're you going to do with them? It's a bad situation. So, anyway, this is just a proposal and hits some of the items and the issues that I should be addressed. I respectfully ask your consideration, my proposal is that we try to put it together in an acceptable format for everyone, coordinate it through the internet. The deadline they're looking at is around June. The final application went in the 31st of March and it is being reviewed for adequacy by FERC. There will be a comment period on it in the vicinity, around June. I would like to have this to be able to go into FERC and AEP during that June comment period. What are your thoughts? Is this, is it worth forcing recognition of the safety issue or is that something we don't want to worry about? John Feild asked would be supporting the addressees to the re-licensing commission. Right. So in that context, I don't have a problem with it. They're going to evaluate and separate the wheat from the chafe so, the people, such as yourself and you who are up there and know what the issues are, if you craft it and circulate it, I for one would support it, Chairman? Yes. Bob Conner said I'm not sure it shouldn't be in the form of a resolution if we're going to do something rather than a letter. I don't know, what do you think Mr. Chairman? I would entertain a motion that we prepare and

disseminate electronically both the 1st communiqué and this one and after coordination of members of the Committee that I send the matter out to full coordination. Read Charlton said we support it. Everybody understand the motion? Yes. Is there a 2nd? Yes. The motion passed. There was no opposition. Bob Conner said I want to make sure that we're a quorum today, we are 6 people here and we have 12 on the Committee. I guess 6 are considered the majority. Where you going to get the tie-breaker from? John Feild stated well, we had some here earlier. Yes, but they aren't here when we're voting though. That's true. Well, in effect the canvassing of the full Committee by way of email will substantiate the quorum. · Bob Conner stated there are 2 items on there, I want to go back. Okay. Greg, I don't know who you going to follow through with and Mr. Delegate we need that other appointment on the bi-state committee. We also discussed, under old business last month, those that retired or resigned from the Board, we were going to recognize them. Mike was not here and you weren't here, but Greg, do you remember that? I think we were going to recognize those members? I'd like to do that at our next meeting. Give them a certificate or plaque or whatever you want to do and have them come here at our next meeting. Chairman Poindexter asked regarding the Bi-State Committee was that done by the legislature last time. John Feild said the Governor has to make that appointment. Who were the 3 that we had? Greg said Haywood Hamlet, Watt Foster, and Mike McEvoy. So Watt resigned so we need a replacement for him. That's right. So, what does that mean now, we still need to? The Governor's got to appointment somebody. Greg said he would communicate with the Governor's office to get an appointment. Bob Conner indicated that John and he agree that somebody on the Lower part of the Basin needs to be on the Committee and that way you have it spread pretty equally along the Basin. John Feild remarked the rub is going to come in, whoever's appointed off of our Committee needs to have sufficient tenure left to be effective because if NC doesn't come to the table and start meeting within a reasonable timeframe most of us old-timers are going to be gone. Unless the legislature changes it in Richmond by statute. Chairman Poindexter said he can entertain a change to the legislation that authorizes the Committee and how it's set up. That can be changed if this group of legislatures here wants it to be changed. It probably wouldn't be a bit of problem changing it. Okay. Greg stated we'll be okay through next year. We're reappointing this time '08 out through 2010. People that were re-appointed this past July are good through July 2009. So if we address, in the next General Assembly session we'll be fine. Then we're okay. Bob Conner stated the final thing from my standpoint, I'm encouraged by the gentleman over here that NC's going to get going and I'd like to see the day that we sit down at the table like this and discuss our issues and come up with some solutions.

Chairman Poindexter said I would pass on a final thing, I have there, among the legislature, members of this Committee that are not here today, in my communications with them in he last 2 or 3 months, there's pretty strong feeling that we need to continue or perhaps accelerate our interest in working water quality and maintaining and our mission.

Committee Reports:

There were no Committee reports. Future Meetings:

The next meeting date will be selected by polling, probably in July.

Adjournment: